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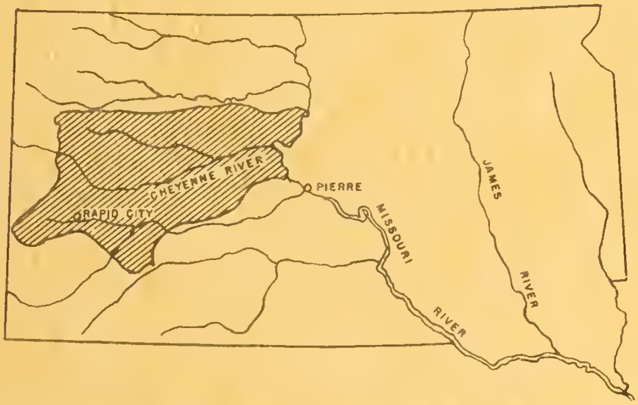
OF THE
PUBLIC DOMAIN LANDS
IN THE

LOWER CHEYENNE RIVER BASIN



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BUREAU OF LAND MANAGEMENT
REGION III
BILLINGS, MONTANA
AUGUST 1953

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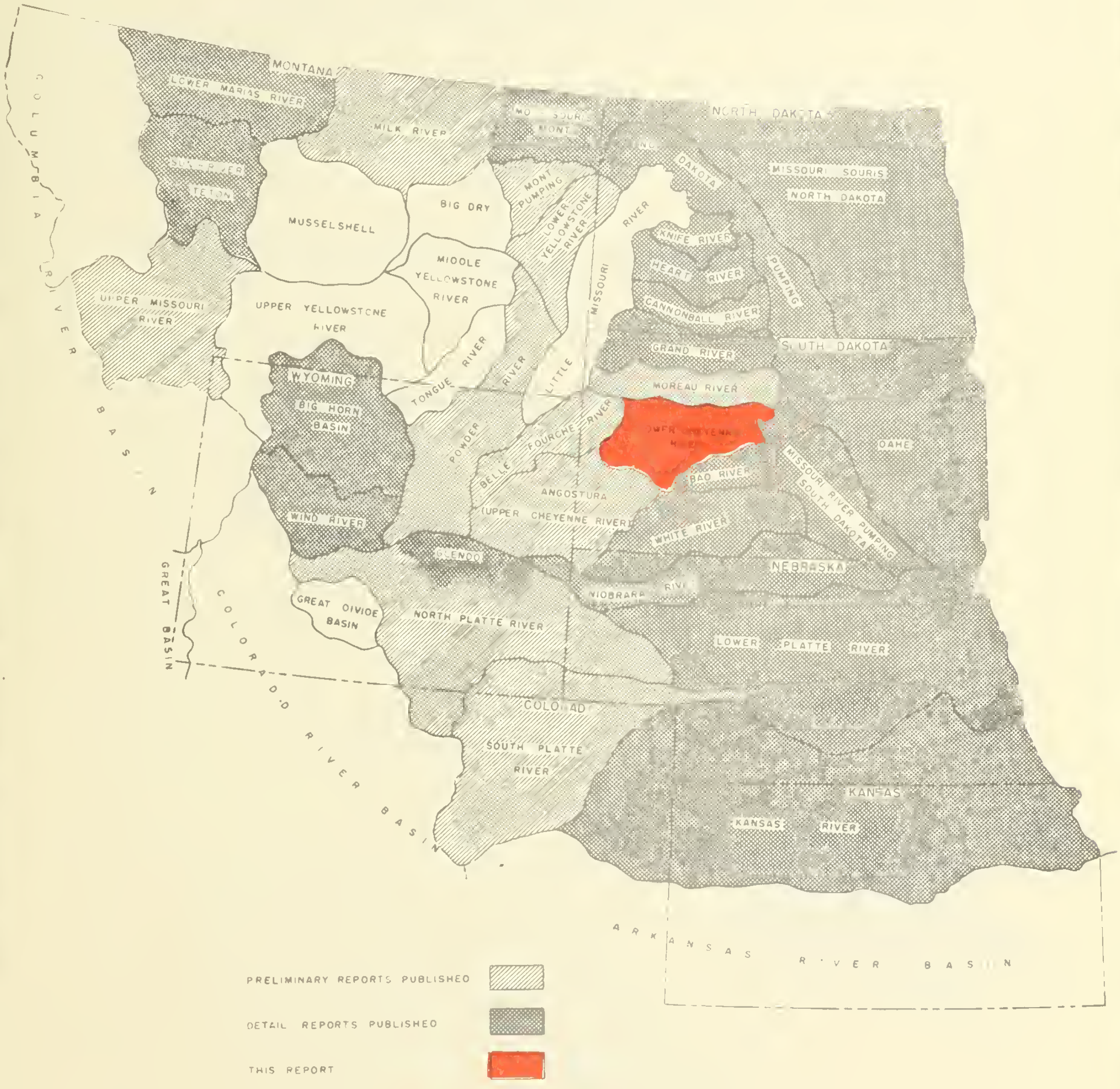
PRESENT STATUS OF BUREAU OF LAND MANAGEMENT STUDIES IN THE MISSOURI RIVER BASIN
(LAND CLASSIFICATION)



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Land Planning and Classification Report of the Public Domain Lands

in the

LOWER CHEYENNE RIVER BASIN

SOUTH DAKOTA

A Missouri River Basin Investigation

For Administrative Use Only

Department of the Interior

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August 1953

This report was compiled as a feature of the program of the Department of the Interior for the development of the resources of the Missouri River Basin

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INTRODUCTION

The purpose of this report and accompanying map is to describe the location, extent and character of the public domain lands in the Lower Cheyenne drainage area in western South Dakota. It is also to serve as a guide for the proper management and development of these lands. General information is given relative to the physical and economic features of the entire drainage basin. The type and size of various existing land management programs in the area are enumerated in order to show their relationship to the public domain lands. These factors govern to a great extent the present and potential use that will be made of the public domain lands remaining in this particular area. Detailed land examination and classification was restricted to public domain lands, except in the central portion of the basin in the area surrounding the junction of the Belle Fourche with the Cheyenne River where there is a considerable concentration of government owned lands. This area has been termed the Big Bend subarea. This entire subarea was studied in detail.

This investigation and report was made as a phase of the Bureau of Land Management's contribution under the coordination program of the Department of the Interior for the comprehensive development of the land and water resources of the Missouri River Basin. Similar studies have been made for other river basin areas within the Missouri River system, and others are in progress. The river basins for which reports have been published are shown on the studies progress map, which is the frontispiece of this report.

Records of land status were gathered from the official files of the Bureau of Land Management, from the records of the counties in the area, and from individual owners. Sources of general information contained in this report are published reports and maps of various government agencies. These agencies include the Bureau of Reclamation, Soil Conservation Service, Production and Marketing Administration, Weather Bureau, Bureau of Census, Geological Survey, the Agricultural Experiment Station and the Agricultural Extension Service of the South Dakota State College. Field representatives of these agencies were consulted and valuable suggestions and information obtained. In addition, information was gathered during interviews with local residents, business men, farmers, stockmen and county officials.

Reconnaissance field examinations and surveys incidental to the compilation of this report were made during the field seasons of 1950 and 1951 by Elmer D. Hunter, Range Conservationist. In the compilation of this report, he was assisted by Charles R. Peteler and Albert H. Shunk, Land Economists. Tom Dudley, Area Manager of Montana Area 3, was consulted during the progress of this study, as the area is under his administration. The map was prepared under the supervision of William C. Anderson, Engineering Draftsman. The over-all study was under the direction of R. D. Nielson, Regional Chief, Division of Lands, Region III, Bureau of Land Management, Billings, Montana.

GENERAL DESCRIPTION

Location and Size

The Lower Cheyenne River area extends from the colorful vacation land area of the Black Hills through the Cheyenne Indian Reservation to the Missouri River in the west central portion of South Dakota. The area extends downstream from the Angostura and Belle Fourche areas. It is bounded on the north by the Divide with the Moreau River drainage and on the south by the Divides with the Bad and White Rivers. The study area is approximately 85 miles wide and 190 miles long, containing about 9, 175 square miles.

The Black Hills derive their name from the color impression given by their dense cover of Ponderosa pine timber. In addition to their important recreational and timber resources, the Black Hills are an important source of many minerals, especially gold, gypsum and cement materials. Eastward from the Black Hills the area is a region of rolling plains typical of the High Plains Province in South Dakota. The Badlands National Monument, with hundreds of weirdly beautiful formations, is located in about the middle of the southern boundary. The two major cities in the area, Rapid City and Sturgis, are located at the foot of the Black Hills near the western edge of the area. With the exception of some Juniper timber in the breaks and small amounts of hardwood stands along some of the creeks and draws, the plains area is largely covered with a grass type of vegetation.

There is some irrigated agriculture along the valleys of the streams leading from the Black Hills, and to a limited extent in some of the bottom lands of the Cheyenne River. Dry farming is practiced extensively throughout the plains area and in the foothills of the Black Hills wherever the land is sufficiently level to permit the operation of large scale tillage implements. Wheat, as a cash crop, is the principal use of the dry farm lands, although considerable amounts of sorghums, corn and hay are grown for livestock feed. A great majority of the area is either too rough or else has soils unsuitable for dry farming. This land is mostly covered with grass and is used almost exclusively for grazing livestock, principally beef cattle.

The Black Hills and Harney National Forests are in the western portion of the area and the Cheyenne River Indian Reservation covers the northeastern portion.

Topography and Physiography

Nearly all of the Lower Cheyenne area is within the Missouri plateau division of the Great Plains Province. It is gently to steeply rolling prairie or high plains land with considerable areas of rough breaks adjacent to the Cheyenne River and its tributaries. The huge uplift of the Black Hills division in the west has created a mountain playground and resources area of outstanding scenic attraction which is famed throughout the United States. Thousands of tourists visit the area annually. Enroute to the Black Hills many of them stop to admire the unusual formations in the Badlands National Monument, along the southern boundary of the area. In addition to these topographic features, Bear Butte is an outstanding land mark just a short distance northeast of Sturgis. The only notable physiographic features in the plains portion of the area are occasional small buttes and the rugged breaks adjoining the Cheyenne River and many of its tributaries. These breaks have frequent small badlands areas with critical erosion and scattered stands of junipers. Their principal value is for winter shelter to livestock. Most of the area is a gently to steeply rolling plains country covered with grass.

The Cheyenne River flows through a narrow valley about 400 to 500 feet below the surrounding plains. The Belle Fourche River, its principal tributary, has similar characteristics. The upland, adjacent to the rivers, is characterized by the badly eroded shale clay breaks which extend for a distance of a mile or more from the edges of the river valley throughout most of the area. Bottom lands along these two rivers usually occur only as narrow strips on only one side of the river at any single location.

Hay crops, whether native grass or alfalfa, are produced on clear areas of this type of land. Irrigation is being developed on some of these sites. Tributaries of the two rivers have usually degraded deeply in their lower regions to match the level of the major streams. The larger tributaries have developed a set of secondary breaks which frequently extend inland for several miles, making obstructions to travel, which frequently require extensive detours. The plateaus, if they are large enough to permit the use of large scale tillage implements, are usually used for dry farming. Upward from the breaks, gently to steeply rolling land extends to the divides which are comparatively indefinite high points on the rolling plains country.

Climate

The area has two fairly distinct climates. Most of the area has the typical arid climate of the dry high plains with the usual violent variations. The Black Hills have a more temperate climate which ranges to subhumid, providing for good forest cover and substantial permanent stream flows from the area. The average precipitation is 21.6 inches at Sturgis, on the eastern edge of the Black Hills, and 18.09 inches at Rapid City, adjacent to the Black Hills. Over the plains part of the area to the east the average rainfall decreases, being 16.23 at Hoakwell, 14.11 at Faith, and 15.16 inches at Ottumwa. Most of the precipitation falls as rain during the growing season from May through September.

Snowfall in the plains portion of the area blows away most years, collecting only as drifts in draws and low places. Snowfall usually collects without much drifting in the Black Hills. Precipitation is not dependable in amount or distribution on the plains. A summer drought from sometime in June until August is frequent. Much of the precipitation in summer occurs as thunder showers which may be highly localized. The plains portion of the area is within the influence of the cyclical droughts which affect the Great Plains. Blizzards and extreme cold occur nearly every winter in varying degrees throughout the plains portion of the area. Hot dry winds and hail storms frequently damage crops and range cover. Climatic conditions favor grasshopper infestations and it is frequently desirable to control this pest.

The length of the growing season varies considerably from year to year, 140 days being about an average. There is considerable danger of both late and early frosts, making almost any season undependable. The climate is more temperate and less variable within and near the Black Hills, even the growing season being more dependable in this area. During the dry years of the 30's, the plains portion of the area was particularly hard hit. Precipitation was very limited or totally lacking for months at a time. The heavy soils typical of most of the area produces no growth of grass under such conditions and no crops were produced. There was widespread distress in the farm areas and emigration from the area was extensive. During this period the Black Hills were affected to a lesser extent and there was actually some movement into the Black Hills area. Climatic conditions within the area are such that cattle can usually be kept on rangeland most of the year. It is the usual practice to supplement the range with some cottonseed cake or other concentrate during bad weather, late winter and early spring. With the higher value of livestock it is becoming increasingly desirable to provide hay, and over 60% of the operators in the area now provide hay for their range livestock in addition to feeding concentrates.

Drainages and Water Supply

The Cheyenne River rises in the high plains area in east central Wyoming, chiefly in Converse County. It flows generally eastward and northeastward. In Wyoming, the flow is largely intermittent in character. This variable intermittent flow is stored in Angostura Reservoir for irrigation, power, and flood control. This upper portion of the Cheyenne River Basin is considered in the Angostura area report of the Bureau of Land Management. Below Angostura Dam, five permanent streams originating in the Black Hills contribute to the flow of the Cheyenne River within the Angostura area.

Three permanent streams from the Black Hills join the Cheyenne within the Lower Cheyenne area. These streams are Rapid Creek, Boxelder Creek, and Elk Creek. Other permanent streams flow northward out of the Black Hills into the Belle Fourche River, which is the largest tributary of the Cheyenne. This stream also has an intermittent flow in Wyoming. Only the lower portion of the Belle Fourche drainage is within the study area, as shown on the map with this report. All other streams contributing to the flow of the Cheyenne come from the plains portion of the watershed and are also intermittent in flow.

The Cheyenne and Belle Fourche Rivers are similar in character. Flow variations are due to seasonal runoffs, general rains, and local storms. Floods have occurred which cover the narrow bottom lands. Maximum flows occur during the spring and early summer months.

Both streams follow rather erratic courses. There is considerable vertical bank cutting, particularly at bends and curves. Opposite this cutting there is usually a flat sand and gravel bar. At some places, the rivers will change their courses again and cut back across these bars and accreted land. If this accreted land is not disturbed for a few years, a growth of wild sweet clover and young cottonwood trees usually starts. This growth will catch silt during periods of high water, and, in time, a better soil type covers the sand and gravel. Due to the construction of the Angostura Dam at about the middle of the length of the Cheyenne, it is thought the possibility of floods in the future has been greatly reduced. Many floods on these rivers in the past have been caused by severe local cloudbursts, and if these should occur below either the Angostura or Keyhole Dams there would probably be flood conditions on the lower reaches of the river concerned.

Stream flows within the study area have been measured at two gaging stations on the Cheyenne River, three on Rapid Creek, and one on the Belle Fourche River. The records of four of these stations are given below as reported in the Geological Survey Water Supply Paper 1077 of December, 1948.

Gaging Station	Drainage Basin Area Sq. Miles	Least Flow Sec. Feet	Greatest Flow Sec. Feet	Average Annual Flow Ac. Feet
Cheyenne River, near Wasta, So. Dak.	12,800	5	46,300	341,222
Cheyenne River, near Eagle Butte, So. Dakota	24,500	4	104,000	731,707
Rapid Creek at Rapid City, So. Dak.	410	22	936	68,824
Belle Fourche River near Elm Springs	7,210	None	35,700	273,122

Soils

Soils of the Lower Cheyenne area are predominately clay soils formed from Pierre shale or other clayey shales. Pierre clays and Pierre Lismas soils are typical in the plains area, much of the country being classed as "gumbo" soils by the local inhabitants. The clay soils are usually on an undulating or rolling topography. Areas of loam soils occur on plateaus near the river and on the plains in the western part of the basin. The loam soils cover considerable areas in Meade and Pennington Counties. Loam soils located on fairly level sites are valued for farming, and nearly all of the dry farming in the area utilizes these areas. The Black Hills are covered with thin soils of granite and sedimentary origin, usually on rolling to steep sites. Badlands are located in and around the Badlands National Monument along the southern boundary.

The soils pattern for the Lower Cheyenne area presents a more or less patchwork pattern, particularly in the western portion. The Black Hills are made up of a number of undifferentiated mountain soils. In the central portion of Pennington County and the southwestern portion of Meade County, the soil is made up largely of Pierre clay, clay loams, and loams. The eastern portion of Pennington County has much of these same soil types, but, in addition, contains irregular areas of badland soil types, as well as some Morton loam. On this latter type will be found the better dry-land farms in the county. In north central Meade County, there are fair sized areas of Morton-Bainville sandy loams, and of the Pierre and clay loams. The greater portion of Butte County that is included in the Lower Cheyenne is made up of Pierre Lismas clay. Haakon County is largely made up of Pierre clay and Pierre loams and clay loams, while Stanley County is made up almost entirely of Boyd clay, and to a less extent of Cheyenne loam. In eastern Pennington and western Haakon Counties, there is a small area of Morton-Bainville loam soil. Some very good farming land is found in this area. Some small areas of fairly good farmland are also found in Meade County.

Most public domain lands are located in breaks of the Cheyenne River or its tributaries, so most of their soils are relatively shallow on steep sites. They are largely clay soils derived from shales with some lighter spots where sandstone caprock has locally affected soil formation.

Vegetal Cover

The Lower Cheyenne area, except for the Black Hills, is largely a grass type with some grass-sagebrush type in the western part. The terrain, extending away from the stream breaks, is made up of wide sweeps of rolling plains, and its vegetation is of the grass type. Deep, finger-like draws extend inward from both the Cheyenne and Belle Fourche Rivers, sometimes for many miles. In these draws there is considerable shrub vegetation which contributes its part in the retarding of erosion. Among these types are RockyMountain juniper, snowberry, buffaloberry, chokecherry, wild plum, and wild rose. In the lower reaches of the Cheyenne, the only evergreen is the RockyMountain juniper, locally called cedar. Along the river itself, and its larger tributaries, there are many stands of deciduous trees of varying ages. Chief among these are the cottonwood and willows, which are very widespread. Others found along the streams in lesser numbers are green ash and boxelder.

The main grasses of the Lower Cheyenne are bluestem wheatgrass, blue grama grass, green needlegrass, needleandthread, buffalograss, threadleaf sedge, side-oats grama, little bluestem, and Sandberg bluegrass. Much of the range is at the present in short grasses, namely: blue grama and buffalograss. Western wheatgrass and the needle grasses are considered climax grasses for this area, and, according to present day thinking, ranges which show a very low percentage of these are not considered as the best type of range. Absence of a good stand of the mid-type of grasses is generally attributed to overgrazing in past years, although many ranchers insist that drouth conditions were fundamentally responsible for this condition.

Vegetation covering the public domain lands is largely grass and juniper types with some sagebrush-grass. Most of the public domain land is in steep breaks where the juniper type is found on the north and east slopes, some of it being quite dense. Much of the grass cover is made up of bluestem wheatgrass, little bluestem, and side-oats grama. Some public domain borders on the Black Hills and has some timber.

The vegetative cover of the forested area of the Black Hills may be said to consist principally of three types: grassland, brush, and forest. The dominant vegetation of the grasslands usually consists of blue grama, Sandberg bluegrass, pinegrass, prairie junegrass, threeawn, green needlegrass, brome grasses, fescues, wheat grasses, and some buffalograss. This type comprises about ten percent of the forested zone. The brushlands may consist of dense thickets of aspen and paper birch on the moist slopes and in the draws of the higher elevations, or aspen and bur oak at the lower fringes of the forest. There is much underbrush, such as hawthorn, serviceberry, gooseberry, snowberry, chokecherry, and creeping juniper. The most characteristic grasses on the more open sites of the brush lands are big bluestem, Canada wildrye, and brome, with squirreltail and redtop locally conspicuous. Among the herbs are horsemint, goldenrod, false solomonseal, thistle, brittle fern, twinflower, wintergreen, and wild strawberry. The brush type comprises probably less than five percent of the forested area, occupying severely burned-over areas.

The timbered areas of the Black Hills are comprised preponderantly of Ponderosa pine in pure dense stands. These dense, dark stands, visible for miles, account for the name "Black Hills". The region is the meeting place of many eastern and western species of trees and shrubs, although in contrast with most timbered areas, the stands vary little as to species of timber with differences in altitude. Besides Ponderosa pine, the only other commercially important tree is western white spruce, which is found along stream bottoms and on steep north exposed canyon slopes, occasionally occuring in pure stands of limited extent on the Limestone Plateau. This is the eastern limit of important commercial stands of Ponderosa pine. Very limited amounts of lodgepole pine and limber pine are present. Other plants more or less associated with this type are RockyMountain juniper, creeping juniper, aspen, paper birch, and bur oak. Grasses are relatively unimportant in the pure timber stands, and consist mainly of scattered pinegrass (Calamagrostis rubescens), alpine timothy (Phleum alpinum), little bluestem (Andropogon scoparius), and squirreltail (Sitanion). The Ponderosa pine type comprises nearly ninety percent of the Black Hills portion of the basin and about ten percent of the whole basin. This type is of high economic importance to the whole northern Great Plains, not only because of its sustaining yield of timber products, but also because of its high benefits for watershed, wildlife, scenic, recreational, and grazing purposes. Nowhere else does Ponderosa pine grow in such dense stands, especially on cutover or regrowth sites. The density of reproduction is a serious problem, as intense competition interferes with timber production and forest regrowth.

A list of the principal plants growing in the Lower Cheyenne River Basin is presented in table 4 at the conclusion of this report. The table lists the plants commonly found in the area with their scientific and common names as given in the book "Standardized Plant Names" by H. P. Kelsey and W. A. Dayton, and published by the J. H. McFarland Company, Harrisburg, Pennsylvania, 1942.

AREA ECONOMY

Population and Public Facilities

The 1950 census figures for South Dakota show little change from the preceding decade, when the State's population also remained practically stationary. In the counties making up the Lower Cheyenne area, some show a gain in population while others show a loss, as listed below:

County	Total Area Sq. Miles	Population 1950	Population 1940	Percent Change Gross	Percent Change Urban	Percent Change Rural
Armstrong	518	52	42	23.8		23.8
Haakon	1,819	3,167	3,515	- 9.9		- 9.9
Lawrence	800	16,648	19,093	-12.8	7.3	-44.0
Meade	3,466	11,516	9,735	18.2	15.4	19.6
Pennington	2,781	34,053	23,799	43.1	82.8	-12.2
Ziebach	1,982	2,606	2,875	- 9.4		- 9.4

Rapid City, the largest city in the Lower Cheyenne area, and the County Seat of Pennington County, grew from 13,844 to 25,310, a growth of 82.8 percent, the largest in the State. This growth was largely due to the activation of the Ellsworth Air Force Base and to some extent by industrial and recreational development. Sturgis, the County Seat of Meade County, grew from 3,008 to 3,471, a growth of 15 percent. The Census Bureau figures given above are somewhat misleading for Lawrence County due to Spearfish becoming an urban area, from 2,139 in 1940 to 2,755 in 1950. Actually this was the only city in the county increasing in population, as the gold mining centers of Lead and Deadwood decreased. These three communities had a total 1950 population of 12,465 as contrasted with 13,759 in 1940, a decrease of 9.4 percent.

The only large communities within the area are the county seats of the more populus counties, so city facilities are few and far between except near the Black Hills. Good highways reach these municipalities, and all have electricity, telephone, municipal water systems, good schools and churches, city auditoriums, amusements, social and business services and organizations. The Black Hills cities are provided with natural gas by a pipeline from Montana and Wyoming fields. It is evident that the country is very sparsely settled. Small ranch and farm holdings over the years have been incorporated with others to make larger units, with a resultant decrease in rural population. This in turn had its effect on the local rural community, particularly in the closing of numerous schools and quite a number of churches; lack of community life; and a shortage of commercial and social services in rural areas. One college is located within the area, the South Dakota School of Mines and Technology at Rapid City. The Black Hills Teachers College is located at Spearfish, a few miles west of the area. Both are co-educational institutions with about 500 students each.

Transportation

Railroad facilities are available in the southwest and northeast portions of the area. Lines of the Chicago and Northwestern Railroad extend westward from Pierre, and lines of the Chicago, Milwaukee, St. Paul and Pacific Railroads extend westward from Chamberlain to the area, Rapid City being the terminus of both lines. The Chicago and Northwestern line from Chadron, Nebraska to Rapid City, Sturgis and Newell cuts across the western part of the area. The Chicago, Burlington and Quincy line from Edgemont crosses the western extremity of the area to Custer, Lead, and Deadwood, which are just west of the area. The Milwaukee Road also operates a 132-mile branch line from Mobridge to Faith, with mixed train service. This line is located along the northern boundary of the Lower Cheyenne area.

U. S. Highways 14 and 16 join near Wall and cross the southwestern part of the area to Rapid City, where they again separate. State Highways 63 and 73 traverse the area in a northerly and southerly direction, and State Highway No. 24 extends eastward from Sturgis to its junction with U. S. Highway No. 73 at Howes. U. S. Highway No. 212 is located along the northern boundary of the Lower Cheyenne area. Numerous county and Indian Bureau roads extend from the main highways eastward from the Black Hills. These roads vary greatly as to their standards, but a program of improvement and extension is constantly being carried on by all counties. U. S. Highway No. 85 is in the Black Hills and a net work of blacktop roads connects the cities and resorts in that area.

Settlement and History

The region in which the Lower Cheyenne area is located has been under three nations. France originally claimed the territory. A leaden plate, testifying to the claiming of it for France in 1742 - 43 by the Verendrye expedition, was unearthed after the turn of the present century by two high school youngsters on a hill above Fort Pierre, South Dakota. Fort Pierre is on the west bank of the Missouri River 15 miles south of the southeast corner of the area. In 1763, France transferred title to Spain, which held it until just before the Louisiana Purchase, when France re-acquired the region. In 1803, the United States purchased the land from France. The country west of the Mississippi was explored by a number of expeditions under the three different governments, culminating in the famous Lewis and Clark expedition of 1804. Trappers, traders, and missionaries followed in the wake of these expeditions.

Territorial government for what is now both North and South Dakota was not established until 1861. Previous to that time the country was more or less under Army control, which had established a number of scattered small military posts, in order to keep the Indians peaceful. The first territorial capital was established in Yankton. Statehood was achieved in 1889, at which time the area was split into two separate states. Pierre was selected for the site of the capital of South Dakota.

First settlements in South Dakota were largely confined to the southeastern portion of the State. Discovery of gold in the Black Hills, in the early seventies, was responsible for the opening up of the portion of South Dakota west of the Missouri River. People flocked to this area, which had been reserved exclusively for Indian use. Troubles with the Indians arose, culminating in the Custer Massacre on the Little Big Horn in Montana. Stage lines were started to the Black Hills, originating in Cheyenne, Sidney, Bismarck, and Fort Pierre, and the towns of Deadwood, Lead, and Rapid City were established in the early days of the gold rush. Upon settlement of the Indian troubles by treaty in 1877, the counties of Custer, Lawrence, and Pennington were organized. Fort Meade was established as a cavalry post to protect the area in 1878. Many gold prospectors turned to farming and ranching near the Black Hills when the gold fever subsided.

The first railroad into the area was a branch of the present line of the Chicago and Northwestern from Omaha, Nebraska to Lander, Wyoming. This line was built from Chadron, Nebraska to Rapid City, South Dakota in 1885 and 1886. The branch line of the Chicago, Burlington and Quincy which terminates at Lead and Deadwood was not built until the 1890's. This branch line extends northward from Edgemont, located on the Lincoln to Billings line. The first land opening in the Lower Cheyenne area occurred in 1890 when a portion of the Great Sioux Reservation, between the White and Cheyenne Rivers, was made available for settlement. This area remained open range until 1905, when the Milwaukee Railroad brought in landseekers. The Milwaukee Road and the Chicago and Northwestern lines both built westward through the area during 1907, leading to settlement of the portion of the area east of the Black Hills.

Previous to 1906 settlement was virtually limited to the Black Hills region and to the Missouri River Valley. Additional reservation lands, in various parts of South Dakota, were opened for settlement from time to time until 1915. A Federal irrigation project in the Belle Fourche Valley, bordering the northwest portion of the Lower Cheyenne area, was completed in 1911. During this period, new counties and towns were organized. However, this period of boom and expansion was interrupted by periods of low prices, droughts, poor yields, grasshoppers and little forage, resulting in hardship to many people and requiring many painful adjustments. These conditions started the trend, which is continuing up to the present time, of ranch holdings becoming larger and larger through the acquiring and consolidation of smaller units.

Population figures for South Dakota, especially the west-river country, have gradually become less and less. This trend was accentuated during World War II, due to many people leaving for defense plant employment in other states. Many of these did not return to South Dakota after the cessation of hostilities, as was also the case of many others who had been in the armed services. However, the 1950 census indicates that the population has become quite stable, urban growth in the area balancing the loss in population of the rural areas. Settlement of the area was served by three land offices, one of which at Rapid City was within the area. Public domain entries were made at the Belle Fourche Land Office located just west of the area from June 1901 until September 1920. The Rapid City Land Office functioned from July 1, 1908 until April 30, 1925. The Land Office at Pierre, south of the eastern boundary of the area, was open from July 1, 1908 until July 30, 1948.

Mining, lumbering and agriculture have contributed to settlement of the area from the first. More recently, tourism has become an important factor. The natural attractions of the Black Hills have been developed by the State and the National Government by means of Custer State Park, National Forest improvements, Mount Rushmore Monument, and Wind Cave Monument. The growth of Rapid City has been due to tourism and industry, as well as mining and agriculture. The establishment of lumber mills here in the early days and their continuous operation has been supplemented by a number of other industries. The State Cement Plant was started in 1925. The Ellsworth Air Force Base was established during World War II and later expanded, contributing importantly to the growth of the city and the surrounding area. Fort Meade, located at Sturgis, aided settlement of the area from 1878 to 1945.

Industry and Agriculture

Economy of the area is varied and rich, largely due to the Black Hills with their varied resources. Located within and immediately west of the area, the Black Hills provide extensive mineral deposits, attractive scenic and recreational areas, large forest areas with valuable timber, and water for irrigation and municipal use. Mining, lumbering, and agriculture have been supplemented by tourism, recreation, governmental activities and industrial development. Each of these industries are so important and extensive that it is difficult to judge the relative position of each in the total economy. Minerals have probably contributed the most in the past and may continue to lead. Rapid City is a wholesale and retail marketing, trade, and distribution center for a large part of western South Dakota, eastern Wyoming, and northwestern Nebraska. It is the center of the Black Hills recreational area and features tourist attractions.

Mining and Minerals

The Black Hills region is an extensively mineralized area. It has been called "the richest 100 square miles on earth". The importance of this during the present national emergency can be readily realized. Among the strategic materials mined in the Black Hills may be mentioned: zinc, lead, tungsten, spodumine, mica, beryl, feldspar, lepidolite, and tourmaline, in addition to a number of other ores. Heaviest concentration of these ores is in the southern portion of the Hills. Gold has been mined for over 70 years in the Black Hills, chiefly in the northern section. The famous Homestake Mine is located here. 1/ Silver is usually found along with gold.

1/ For a description of the Homestake Mine see page 11, Belle Fourche Basin Report of the Bureau of Land Management, Region III, January 1952.

Cement produced at the State Cement Plant in Rapid City is second to gold in value, followed by feldspar, silver, limestone, mica, lithium minerals, and gypsum. Iron occurs in extensive deposits in the Estes-Boxelder district, centering near Nemo. These deposits may be important and should be explored.

A part of one of the most extensive deposits of lignite coal in the United States is found in northern South Dakota. This extends southward to include portions of Armstrong and Ziebach Counties in the Lower Cheyenne drainage area. It has been estimated that only about 50,000 tons of lignite has been mined annually in recent years. A considerable amount of this is used locally for fuel. It is generally felt that the real value and importance of these deposits in the future lies in the chemurgy, fuel, and power possibilities, particularly in liquid fuel development.

The recent discoveries and developments of oil in the Williston Basin in North Dakota and Montana have revived interest in northwestern South Dakota oil prospects to a very marked degree, as this area is considered by geologists as a part of the Williston Basin. Practically every available acre is now covered by an oil lease. Several wells in different locations in the Lower Cheyenne are being drilled at the present time. However, to date, no well has been "brought in". Natural gas was found years ago in Stanley County, usually in connection with the development of artesian wells. Several ranches in northern and central parts of this county have captured and used this gas for cooking, heating, and refrigeration for some time. Extensive oil fields occur in Wyoming just west of the area.

Gold was discovered in the Black Hills in 1834. The gold rush to the area took place in 1876. Placers were active in the area from 1875 to 1880 and during the depression years of the thirties. Nearly 90 percent of the gold value has been taken from the Homestake Mines. The most recent mineral development in the area is the establishment of an ore buying station at Edgemont for uranium, which occurs as carnotite in the area. Most of the minerals in the area have been developed from claims filed on the public domain. The patchwork and network of patented and unpatented mining claims within the Black Hills makes a problem in land administration in the area.

The Bureau of Mines has published a report which describes the mineral resources of the area. This report is entitled "Mineral Resources of the Cheyenne Division in Southwestern South Dakota and Northwestern Wyoming", Preliminary Report No. 77, January 1953. The following list shows the extent and relative importance of the minerals of the area as measured by value produced:

	Period		Value
Metal	From	To	Dollars
Gold	1876	1951	$597,870,429
Silver	1876	1951	7,440,743
Cement	1925	1950	22,248,074
Limestone	1896	1950	4,913,798
Gypsum	1884	1948	1,711,499
Pegmatites:			
Feldspar (crude)	1923	1950	3,613,441 1/
Mica	1879	1950	3,069,932
Lithium minerals	1898	1950	1,922,139
Beryl	1914	1950	220,982
Columbite-tantalite	1918	1948	116,411
Tin	1884	1948	109,111
Rose quartz	1889	1950	84,884
Tungsten	1898	1918	21,325
Andalusite and silimanite	1924	1932	2,470
Pollucite	1928		2,000
Sub-Total			
Pegmatites:			9,162,695
Tungsten concentrates	1898	1950	1,369,177
Gravel	1909	1950	1,438,094
Sandstone	1884	1950	696,450
Misc. stone	1921	1949	442,853
Quartzite, crushed	1921	1929	192,500
Iron Ore	1893	1950	310,767
Purite	1876	1928	130,000
Lead	1888	1949	179,015
Zinc	1942	1948	56,406
Copper	1909	1944	36,466
Arsenic	1924	1925	7,167
Total			$648,206,133

1/ This value is only one-third of the crushed product which is the form in which it is produced and sold.

As the Black Hills are located within and west of the area, it is difficult to divide the figures for the area. Most of the sandstone was produced south of the area. The other minerals have been largely close by. In addition to other minerals mentioned, important clay deposits exist within the area of fire, brick, and ceramic grades. Fuson clay beds, 45 feet in thickness, are located south of Rapid City. Bentonite deposits are found north and west of the area. Other minerals will probably be found within the area and new uses for present discoveries will probably enrich the future economy of the region.

Agriculture

Livestock grazing is the chief agricultural enterprise in the area. Considerable dry-farming is carried on, much of it in conjunction with the ranching enterprise. Small grains are usually raised, some for a cash crop and some for supplementary feed. There is considerable irrigated agriculture, principally in the valleys of the Black Hills streams, especially Rapid Creek. Hay is a leading crop, both irrigated and dry-farmed. Native hay is cut in draws, on river bottom meadows,and on upland, in favorable years. In the lower portion of the area, particularly in Stanley and Haakon Counties, cattle production is practically the only type of livestock enterprise. In the upper or western part of the area, in Pennington, Meade and Butte Counties, there are a number of sheep ranches. However, the area is largely a cattle country. Spreads of 25,000 to 30,000 acres, and even larger, are not uncommon.

A number of stockmen in close proximity of the Black Hills have some grazing privileges in the Black Hills National Forest. The majority of the stockmen are confined to operating on land under their control, at or near their base of operation. Most stockmen in the area produce sufficient hay to carry their stock over the winter. In long or severe winters, it is usually necessary to supplement the hay with grain or cottonseed cake. Many stockmen grow some grain under dry-farming methods, part of which may be sold. Grain and hay production here are entirely mechanized operations. The grass is cut and windrowed in one operation at the time when its protein content is highest. In many cases the hay is thus left for stock to pick up during the winter months. More recently, with the advent of the automatic hay baler, the hay is baled and then either left on the ground for the cattle to use or hauled to the feeding lot. One much needed improvement in the program of many stockmen is the production of more hay each year. During years of hard and prolonged winters the hay supply may become low or entirely consumed. This would make it necessary to feed high priced cake or other concentrates for varying periods until grass is available in the spring. In severe winters, it may be necessary to purchase hay.

Irrigation and Water Development

Rapid Valley Unit and Rapid Valley Project are the only irrigation projects within the study area. Pumping units are proposed along the Cheyenne and Belle Fourche Rivers. The Belle Fourche Project is immediately west of the area, and the Redwater Irrigation District is also located there. There are numerous small private irrigation diversions from the Black Hills streams, principally for hay production. Some hay and other crops are irrigated by pumping from the Cheyenne River.

Rapid Valley Project includes Deerfield Reservoir on Castle Creek. This provides 15,700 acres of storage water and supplements both the domestic water supply of Rapid City and the supply used for the 8,900 acres of the project. Growth of the city and of Ellsworth Air Force Base have caused this storage to be insufficient. The Rapid Valley Unit includes Pactola Dam, which is under construction for the Bureau of Reclamation to provide additional storage for 99,000 acre feet of water. There will be 55,000 acre feet of conservation storage, 43,000 acre feet of flood storage and 1,000 acre feet of sediment storage. In addition to providing further supplemental water for the Rapid City municipal supply and for the Rapid Valley Project, an additional 2,200 acres of land will be brought under water for the first time. It also will provide a reliable and improved water supply for the expanding Ellsworth Air Force Base. The dam is scheduled for completion in December 1955. The total cost of the Rapid Valley Unit will be $9,630,000.

Missouri River Basin development plans of the Bureau of Reclamation have proposed the development of 49 pumping sites to irrigate 25,300 acres of bottom land along the Lower Cheyenne River. It is also proposed to develop about 5,000 acres of land along the Belle Fourche River. During the 1951 field season, soil classification teams of the Bureau of Reclamation made detailed examination of all sites along both the Cheyenne and Belle Fourche Rivers that could be irrigated. It is understood, however, that much of the land examined was eliminated from further consideration, largely because of adverse soil conditions. There are already in existence a number of small irrigation projects on privately owned lands or Indian holdings on the Cheyenne Reservation. These utilize pump water from the river, or gravity flow from reservoirs which store runoff water from range lands.

Since both the Cheyenne and Belle Fourche Rivers originate in Wyoming, compacts or agreements have been proposed between that State and South Dakota. An agreement allowing South Dakota 90 percent of the water of the Belle Fourche, and Wyoming 10 percent, was ratified on March 3, 1943. A compact allowing South Dakota 80 percent of the stream flow of the Cheyenne and 20 percent for Wyoming was ratified by the 1951 South Dakota legislature but rejected by the Wyoming legislature.

Forestry and Timber Products

Lumbering operations in the Black Hills began practically simultaneously with the beginning of mining operations and establishment of towns in the area. At that time, cutting was unregulated; furthermore, little was done in the way of forest protection. It was not until 1898 that the Black Hills Forest Reserve was established and the forests put under control and supervision. It is now estimated that nearly three billion board feet of lumber has been cut in the Black Hills from the coming of the first white men to the present time. Present day logging and lumbering operations are much improved over those of the early days. This is due to better machinery and equipment and the use of small portable sawmills. The larger mills are located in the towns and cities, and here the specially designed log trucks play a very important part in bringing the logs to the mills. Cutting in both present day National Forests embracing the Black Hills is now done on a sustained yield, selective cutting basis. The annual cut for the two Forests is 36 million board feet. The timber thus cut has a wide use as lumber, mine timbers, and millwork, in addition to providing fuel, posts, poles, pulp wood, and house logs. Apparently, the sawdust burner, so widely used in Pacific Northwest with small home furnaces, has never been used in the Black Hills region to any extent, and great piles of sawdust at the mills go to waste.

The Ponderosa pine timber of the Black Hills presents certain problems which should be considered and solved if feasible. The trees and logs are small, with a low percentage of clear lumber. The stand, particularly young stands, are very dense.

Thinning hastens production and can be made profitable if a market can be provided for the thinned trees. The best possibility would be a suitable market for pulp wood, which could be best provided by a pulp mill in the Black Hills area. A pulp mill, by providing economic thinning, would enable timber of larger size and higher grade to be produced in much less time. The cutting cycle would be shortened and the economy of the area would be greatly benefited. Sufficient water for a pulp mill could probably be developed by storage on a Black Hills stream.

Recreation and Wildlife

The Black Hills are a renowned scenic and recreation area. People from all parts of the country, especially the mid-West, visit them each year. Mountains, streams, lakes, and forests afford hunting, fishing, swimming, and hiking. The Hills are well provided with resorts, roads, and accommodations. A never-to-be-forgotten attraction is the Mount Rushmore National Memorial, upon which are carved the heroic size heads of Presidents Washinton, Jefferson, Lincoln, and Theodore Roosevelt. The Black Hills are largely within the boundaries of either the Black Hills or Harney National Forests. Game animals are deer, antelope, elk, and some Big Horn sheep and mountain goats, with an open hunting season for deer each year. Black Hills streams provide the only trout fishing within a large distance. The creation of the lake behind Pactola Dam will provide a large water surface for aquatic sports and lake fishing. This is needed in the area to properly complete the recreational facilities available. It is estimated that 750,000 to 1,000,000 persons visit the Black Hills annually, most of them enroute to some other vacation spot. Many residents of the area near the Black Hills, and some more distant regions, spend their entire summer in private cabins in the Hills. All of the Black Hills cities and towns are well provided with hotels, motels, and other tourist accommodations.

The colorful, wierd formations of the Badlands National Monument, on the southern boundary, attract thousands of visitors annually. Durkee Lake State Park, three miles south of Faith, provides good fishing, swimming, and golfing. Reservoirs in the area provide swimming, fishing, and ice skating.

Along the Lower Cheyenne River, white-tailed deer have become fairly abundant during the last ten years. Up to 1951 it was unlawful to hunt deer in the area, but some deer were killed on the Indian Reservation. In 1951, hunting was allowed in Stanley County, and in 1952 there was an open deer season in all of the area.

Antelope have become sufficiently numerous so that a ten-day hunting season was established for Meade County in 1951. The area contains some of the better sharp-tailed grouse populations of the country. Some pheasants are found in the vicinity of farming operations. Prairie chickens and Hungarian partridge also inhabit the area. In 1952, 3,500 antelope licenses were issued for Meade County north of the Belle Fourche River. These licenses cost $7.50 each, a revenue of $26,250 for the State of South Dakota. A 98 percent hunter's success was reported. Most of the deer in the State are in the vicinity of the Black Hills. The Fish and Game Department of the State of South Dakota desires that concentrations of public domain land in the area be retained in public ownership to provide range forage for deer and antelope.

The construction of the Oahe Dam will produce a recreational area for the eastern portion of the Lower Cheyenne. Oahe Lake will be an immense body of water extending 200 miles up the Missouri, and 46 miles up the Cheyenne River. This large lake will be suitable for fishing and aquatic sports. There will be little use for much of these recreational facilities, as there are no large centers of population in the vicinity, and access roads to the prospective lake shore are limited at the present time. Much of this tentative lake area is quite isolated, with little or no scenic attraction. A large concentration of public domain is found along the Lower Cheyenne near the proposed lake shore. This stretch offers little in the way of recreation. It does have some value for wildlife conservation due to the tree and brush-covered areas along the banks and draws of the rivers and their tributaries, and in the adjacent breaks. Some protective areas could be established under appropriate agencies in locations where the public domain is more concentrated. These areas will assume increasing importance as wildlife habitat resulting from use by wildlife populations to be displaced by the Oahe Reservoir. The eastern portion of the Lower Cheyenne has little to offer in the way of attracting sportsmen, except deer hunting. During 1951 and 1952 excellent deer hunting was experienced in portions of the Lower Cheyenne area and a large number of deer were taken. Duck population around various stockwater reservoirs apparently has been on the increase and some good hunting has been reported. Some goose hunting is available in the area.

Electric Power

The Black Hills and much of the western portion of the basin is served by the Black Hills Power and Light Company. The principal source of their power is thermal plants at coal fields in Wyoming, west of the area. They also have two small hydroelectric plants of 1,000 and 346 kilowatts on Redwater Creek and buy the production of the Bureau of Reclamation Plant at Angostura Dam. Homestake Mining Company produces power at coal mines in Wyoming, from small hydroplants in the Black Hills, and also has a large natural gas fired thermal plant in the Black Hills. The Black Hills Power Company operates thermal plants at Rapid City and Pluma, and diesel plants at Rapid City, Custer, Provo, and Edgemont. Faith has a municipal plant.

Until recently, the eastern and central parts of the area have not been provided with electricity. The promise of cheap power and high demand from the scattered farms, ranches and tiny communities has made it possible for Rural Electric Cooperatives to plan and construct lines in this sparsely settled area. They will be supplied by the Bureau of Reclamation transmission line from Oahe to Rapid City. Substations on the line are at Midland, Phillip, Wall, Wicksville, and Ellsworth Air Force Base. This line will distribute power from Fort Randall commencing late in 1953, and it is tied in with the Missouri main stem transmission system. The southeastern part of the area is served by the West Central Electric Cooperative. The central portion is largely served by the West River Electric Association. The northern part is provided with electricity over the lines of the Moreau-Grand Electric Cooperative. The market for power is large in the Black Hills. The Homestake and other large mining operations are operated by electric power. The cement mill, flour mills, and the large lumber mills are also operated by electric motors.

Government Agencies

Government has contributed to the economy of the area from the time of settlement. Fort Meade was a cavalry post from 1878 until 1945, when it was abandoned. A Veterans Hospital was established on the site in 1945. The two National Forests, Black Hills and Harney, have contributed substantially by forest protection and administration, and through recreational and access facilities. The State and local governments promote tourist travel in the Black Hills. The State of South Dakota established and operates the cement mill. The plant was established in order to have cement produced in the State. The South Dakota School of Mines and Technology at Rapid City, and the Black Hills Teacher's College at Spearfish, are State Colleges. The Ellsworth Air Force Base at Rapid City contributes substantially to the trade and industry of Rapid City. It has been largely responsible for the recent rapid growth and development of the city. The Bureau of Reclamation is developing the Rapid Valley Unit, which includes municipal water for Rapid City and the Ellsworth Air Force Base. This Bureau will complete a power line from Oahe to Rapid City late in 1953, providing low cost power to the rural areas of the region and promoting trade, industry, and agriculture. The State of South Dakota maintains a fish hatchery at Rapid City, and the Fish and Wildlife Service operates a Federal fish hatchery at Spearfish, on the western border of the area.

Trade and Industry

Four types of milling contribute substantially to the economy of the area: mineral, lumber, cement, feed and flour. The grinding of flourspar increases the value of the raw mineral three times and is one of the principal mineral industries of the Black Hills area. The cement mill at Rapid City supplies most of the cement to South Dakota and within its shipping radius. Lumber mills make lumber, mill work, ties, and mine timbers from Black Hills timber. Ore milling is an important part of mining operations of the numerous mines in the area. There is a model flour mill at Rapid City which manufactures bakers and family flour from local and transit wheat. A complete line of proprietary feeds is also manufactured.

In addition to the mills at Rapid City, there is a large meat packing plant. There are a number of wholesalers, distributors, and service organizations located here. Several contracting firms headquarter here, and they are the largest employment group in the city. The diversity of industry in Rapid City is shown in the following list of major employers in the city:

Organization	No. of Employees
General and Heavy Building Contractors	1,955
Bell Telephone Company	264
Black Hills Gold and Jewelry Manufacturing Co.	21
Black Hills Packing Company	80
Black Hills Power and Light Company	99
Buckingham Wood Products Company	131
Buckingham Transportation Co., General Office	114
Central Mix Concrete Company	44
Dakota Lime and Brick Company	26
Fairmont Foods	65
Hill Material Company, Quarrying	40
Warren Lamb Lumber Manufacturing Company	80
Pete Lien and Sons, Quarrying	38
Montana-Dakota Utilities (Gas)	80
Rapid City Daily Journal	85
South Dakota Cement Plant	210
Tri-State Milling Company	85
F. W. Wauder Baking Company	88

Ample supplies of electric power are available in most of the area for industrial, commercial, and residential use. Natural gas for industry, electric power production, heating, and domestic use is brought into the Black Hills area by pipeline from Montana and Wyoming fields.

Public Domain

The Lower Cheyenne area is about 5,720,000 acres in extent. It contains 102,944 acres of public domain land under the jurisdiction of the Bureau of Land Management. These areas are distributed among the counties within the area as follows:

County	Gross Area in Basin (Sq. Mi.)	Public Domain Tracts (No.)	Public Domain Area (Acres)
Armstrong	531	--	--
Butte	432	84	11,136
Haakon	846	110	12,789
Meade	3,322	182	42,841
Pennington	1,696	125	16,853
Stanley	366	89	19,325
Ziebach	1,982	--	--
Total	9,175	590	102,944

Armstrong and Ziebach Counties contain no public domain as they are within the Cheyenne River Indian Reservation.

Public domain lands comprise somewhat less than two percent of the total land area included within the boundaries of the Lower Cheyenne area. They are important for wildlife, watershed, and recreation. Otherwise, they have relatively little influence on the area economy or on any program of development because of their individual size or total area. Most of the public domain land is in rather small scattered tracts, mostly forty and eighty acres in size. They are located in areas which are utilized either for a combination of dry-farming and grazing or entirely for grazing. Ninety-nine percent of public domain lands in this area is suitable only for grazing. Lands which were adaptable for agricultural purposes passed into private ownership many years ago. Virtually all the better type of grazing land, as well as much of the lower grade, has also gone into private ownership. Highest use of much of the small tracts remaining as public domain land would be obtained if they were incorporated and used with adjacent privately owned land. In localities of considerable concentration of public domain in a relatively small area, public interest would best be served by retaining the land in public ownership. These public domain lands are most valuable for big game range and watershed.

Each isolated tract of public domain land in the area has been examined and classified. A detailed report has been prepared for each isolated tract. These reports are on file at the Region III office of the Bureau of Land Management in Billings, Montana. A summarization of these reports has been tabulated and is presented on the last pages of this report. Nearly one-third of the public domain within the area is concentrated about the Big Bend of the Cheyenne River in the central part of the basin. This section was examined and classified on an area basis and is considered as a subarea later in this report. A comparatively small area of concentration of public domain occurs in the extreme eastern portion of the area in the Missouri River breaks. These and other minor concentrations of public domain within the area are shown on the map of the area on the State of South Dakota map with this report. They have been examined and classified as separate tracts and are included in the tabulation with this report.

Land Management Programs

Within the area which makes up the Lower Cheyenne drainage covered by this report, there is a large amount of land under the supervision of other Federal agencies. There are about 620,000 acres of Indian land in the study area. The area of Black Hills National Forest within the study area is approximately 120,000 acres. Bad Lands National Monument, administered by the National Park Service, is located in the southwestern portion of the basin, its area within the basin being 40,472 acres. The Bad Lands Land Utilization Project (S.D. #1), under the Soil Conservation Service, with headquarters at Wall, covers an area of 182,170 acres in Pennington County, a considerable portion of which is located in the Cheyenne drainage. Included in this total is 2,368 acres of public domain lands which were transferred to the Department of Agriculture by Executive Order #8361 for supervision. The boundaries of these three areas are shown on the South Dakota map with this report. Five Soil Conservation Districts have been organized within the Lower Cheyenne area. These, with their headquarters, are as follows:

Pennington County	Rapid City
Eastern Pennington	Wall
Elk Creek	Sturgis
Tri-County	Faith
Haakon County	Philip

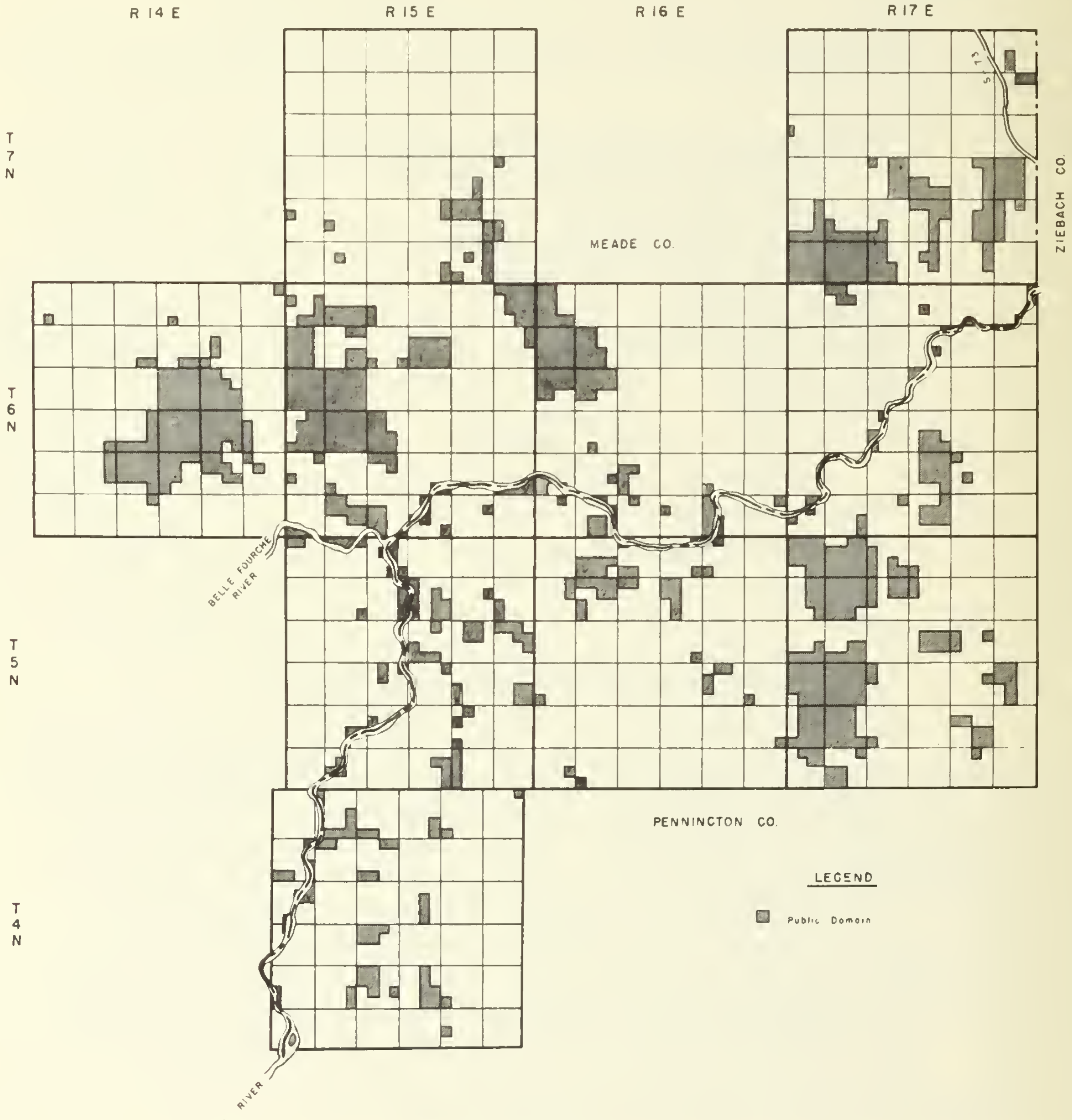
Within the boundaries of Lower Cheyenne drainage there are also approximately 299,823 acres of State school lands administered by the State Commissioner of School and Public Lands.

Ownership of land within the Lower Cheyenne is summarized as follows:

Bad Lands Land Utilization Project, S. D. #1 (Soil Conservation Service)	22,782 acres
U. S. National Forest	120,000 acres
Bad Lands National Monument (National Park Service)	60,800 acres
Public Domain	102,944 acres
Indian Reservations	620,000 acres
State Land	522,182 acres
Fort Meade	
Veterans Admin. Hospital	3,276 acres
Surplus for transfer	5,057 acres1/
Black Hills National Cemetery	106 acres
Privately owned	4,267,910 acres
Total	5,720,000 acres

1/ Included in public domain figure above

In the early forties, every county in the basin had foreclosed on many thousands of acres of range land for delinquent taxes. As economic conditions improved, the counties made a concerted effort to get this land back on the tax rolls by offering it for sale at an average price of $1.00 per acre. No preference was given adjacent owners in case competitive bidding developed. Additional effort and expense are necessary to clear the titles of tax-delinquent land. Unfortunately, many prospective purchasers of public domain lands have the erroneous assumption that the prices at which the counties offered this land at that time set the standard for future public land sales. At the present time, no county has in excess of a few hundred acres of unsold tax-delinquent land.



MAP OF THE

BIG BEND SUBAREA

IN THE

LOWER CHEYENNE RIVER BASIN

SOUTH DAKOTA

AUG., 1953

BIG BEND SUBAREA

Description

The Big Bend subarea is the only considerable area of concentration of public domain land in the Lower Cheyenne area. This is located about the center of the area in the vicinity of the "Big Bend" in the Cheyenne River, where the stream changes its course from north to east. The subarea contains 34,505 acres of public domain, nearly one-third of the total in the entire Lower Cheyenne drainage.

In Pennington County, there are 13,852 acres of public domain in seven townships. In Meade County, the public domain totals 20,653 acres in nine townships. Public domain acreage ranges from 1,030 to 6,690 acres per township. There are four tracts in this area made up of not less than five sections in a single block and a few others made up of three or more sections in a single block. Numerous 40 to 160 acre tracts are located in these townships and several lots along the rivers ranging from a fraction of an acre upwards in size. Location of the public domain is shown on the map of the Big Bend subarea in this report. The only other type of public ownership in the Big Bend subarea is State school land. This type is limited practically entirely to Section 16 and 36 of the townships within the subarea. All remaining land is privately owned. Public domain land forms approximately 15 percent of the total land of this special study area.

The subarea was examined on an area classification basis. Large scale maps of the subarea, showing the area classification, have been prepared. These maps are filed at the Region III office of the Bureau of Land Management. Field examination brought out that 99 percent of this public domain land is practically similar and identical in character. This land is located in the breaks of both the Cheyenne and Belle Fourche Rivers. The main breaks usually extend finger-like for varying distances at right angles from their respective streams, and usually have many smaller side draws opening into them. Characteristics of this land are its roughness, as it is made up of numerous narrow ridges and alternate draws with steep slopes. These have many small scattered areas that are bare or semi-bare of vegetation. Gravel outcroppings characterize the tops of practically all the ridges.

Erosion is a very pronounced factor in the breaks. Sheet erosion is quite prevalent, especially on the steeper slopes, but wind erosion is negligible due to the soil type, which is largely shale clay. Gullying is the most severe type of erosion. In many places critical gullying has occurred in the past, and a gradual healing is now taking place. In others, active gullying is still continuing, and "headers" are working up both main and side draws. Many small, narrow, crooked draw bottoms in which ranchers formerly cut native grasses for hay are now completely ruined for such purpose as a result of gully cutting.

Vegetation, or range type, varies from thin or heavy stands of grass to a combination of grass and juniper trees. In the breaks, the predominant species of grass are bluestem wheatgrass, little bluestem, and side-oats grama. These latter two grasses stop practically immediately, once the breaks begin to level out at their tops, and are replaced by blue grama and buffalograss, which frequently are found intermingled in large matted areas, and, to a less extent, by needleandthread and threadleaf sedge. Cottonwood is the predominate species of deciduous tree along the watercourses. Over much of the "breaks" there is a fair stand of medium-size juniper trees. By far the heaviest stand is found on the north and east slopes. The stand is quite scattered on the west and south slopes because of moisture conditions. The native juniper is the source of some fence post material, but it has been pretty well cut over several times in the past and the amount currently available is relatively small. Greatest value of these trees is the shelter they provide livestock and control of erosion.

If there is any difference between privately owned and government lands in the Cheyenne and Belle Fourche breaks, it is usually found that the government land is the poorer. It is generally recognized that this land is the "leavings". All of it is rough, and all of it has been eroded to varying degrees. If over-grazing took place on adjacent privately owned land, it certainly took place on the government land. Practically all the government land is quite isolated and difficult of access as a rule. No improved roads are located in this area and only scattered range trails and jeep tracks traverse the breaks, following the ridges as much as possible. Changes in the location of these trails have to be made from time to time because of head gullies working up the draw bottoms.

The economy of the Big Bend subarea is based on grazing with some dry-farming. Dry-farming operations are practiced on the areas having more favorable topographic and soil conditions. These are along the rivers and the small flats or plateaus found on some of the tops of the breaks. Small grains, corn, cane, and sudan grass are grown. Hay is an important crop. Native grasses and alfalfa are cropped for this purpose. Common to the trend in all sections of the country, there has been a buying up of small holdings in this area for consolidation to form larger and larger units. The sale of large blocks of county tax-delinquent land during the forties at quite low prices did much to encourage this practice, which is continuing. One marked result is the numerous one-room county school houses which have been abandoned, as well as occasional small rural churches. Road improvement near this area seems slow as well as limited, being done entirely by the respective counties on limited funds.

Area Classification

The Big Bend subarea was examined on an area classification basis. Large scale maps have been prepared for the area showing land use capability, land resource condition, recommended stocking rate and erosion. Compilations have been made from these maps for the recommended stocking rate. The land use capability class of public domain land has also been compiled. The recommended stocking rate and area of lands in the subarea by townships is shown in table 1. Areas on the maps were computed on the basis of the land survey. Since that time, the Cheyenne River has changed its course and will probably continue to shift its location. Public domain lands in the subarea have been classified according to land use capability, as presented in the following tabulation. The area of each class is shown in acres by townships:

Location		Area	Land Use Capability Class			
Twp.	Rge.	Acres	I to V	VI	VII	VIII
4N.	15E.	1,980	67	4	1,661	248
5N.	15E.	2,655	165	11	1,888	601
	16E.	1,675		70	1,556	49
	17E.	6,690		264	6,426	
6N.	14E.	4,642	43	128	4,471	
	15E.	6,407	59	195	5,938	215
	16E.	3,006	50	215	2,512	229
	17E.	1,669		81	1,332	256
7N.	15E.	1,030	25	189	816	
	17E.	4,751		10	4,741	
Total		34,505	399	1,167	31,341	1,598

Table 1. -Area and Recommended Stocking Rate for Land in Different Ownerships by Townships within the Big Bend Subarea of the Lower Cheyenne River Area, South Dakota, 1952 1/

Location		Public Domain		State		Private			Water Surface	Total	
						Range		Crop			
Twp. North	Rge. East	Acres	AUM's	Acres	AUM's	Acres	AUM's	Acres	Acres	Acres	AUM's
4	15	1, 980	115	1, 280	156	19, 537	2, 982	244	374	23, 415	3, 253
5	15	2, 655	189	1, 225	173	13, 835	1, 468	4, 678	472	22, 865	1, 830
	16	1, 675	138	1, 280	169	18, 546	2, 722	1, 377	106	22, 984	3, 029
	17	6, 690	938	2, 080	627	12, 960	2, 605	1, 111		22, 841	4, 170
6	14	4, 642	439	1, 255	196	16, 557	3, 398	456	25	22, 935	4, 033
	15	6, 407	716	1, 180	213	14, 802	2, 353		339	22, 828	3, 282
	16	3, 006	208	1, 219	308	16, 842	3, 049	1, 395	374	22, 836	3, 565
	17	1, 669	119	2, 427	321	15, 672	1, 724	2, 450	507	22, 725	2, 164
7	15	1, 030	132	1, 280	166	18, 167	4, 018	2, 300		22, 777	4, 316
	17	4, 751	461	1, 280	155	16, 145	2, 036	463		22, 639	2, 652
Total		34, 505	3, 455	14, 506	2, 484	163, 063	26, 355	14, 474	2, 197	228, 845	32, 294

1/ Compiled from field investigations, Bureau of Land Management, Region III, Billings, Montana, 1951.

No tabulation was prepared for lands in other ownerships. Other lands are virtually the same in classification within the "breaks". Outside of these river "breaks" the land improves in quality and capability and public domain is not found there.

Most of the public domain land within the subarea is in poor condition. Nearly all of the public domain in the following townships is in poor condition: Twp. 4N., Range 15E.; Twp. 5N., Ranges 15 and 16E.; Twp. 6N., Ranges 16 and 17E. In addition to the poor condition, considerable areas in fair condition were found in Twp. 5N., Range 17E., and in Twp. 7N., Range 17E. Nearly all of the public domain was in fair condition in Twp. 6N. within ranges 14 and 15E. In Twp. 7N., Range 15E. there are 510 acres in fair condition, 320 acres are in poor condition, and 200 acres are in good condition.

Erosion in the subarea varies in degree from 1 to 5. Sheet erosion varies from 1 to 3. Wind erosion is not considered a factor,not exceeding 1 on any considerable area. It is noticeable in local areas at points and on brows of the steep breaks. Gully erosion is the most severe, ranging up to 5. Expressed in the order given, erosion ranges from 2-1-1 to 3-1-5, as shown on the erosion maps which have been prepared for the subarea. Most of the public domain land was classified as being 3-1-4 or 3-1-3 erosion, very little being 2-1-1 erosion. Land in this location is privately owned. Much of the major gully erosion is probably geologic, but there are evidences of man-caused accelerated gully erosion. It is difficult to distinguish between the two causes within the subarea.

Wildlife

Deer utilize the area in large numbers. They have increased rapidly in recent years. The cover and conformation of the subarea are both very well adapted for a deer habitat. The subarea appears to be an excellent winter protection area for antelope, and may be preferable to them as compared with the Black Hills. As antelope become more numerous and spread further eastward, the importance of this area for them will increase, especially in the event of severe winters. Grassland areas within the subarea which are protected from use by cattle because of topography are important for grouse. It is possible that the subarea may prove to be a valuable wild turkey range.

Land Use Suitability

Present land uses of the subarea are the multiple-uses of watershed, wildlife, grazing, shelter, recreation, and minor timber values. The watershed value is principally negative. The character of the area is such that grazing use must be light or headcutting and gully erosion will be accelerated and the rough breaks will cut back into the level plains. If a good cover is not preserved on the area, excessive erosion and sediment production will result.

Wildlife utilize the area for habitat, shelter and feed. The terrain and cover are both well adapted to deer. With the exception of the Missouri River bottoms, this subarea is the farthest east of such sites in the State. As development of Oahe, Big Bend, Fort Randall, and Gavin's Point Dams will flood out practically all of the best deer habitat and feed along the mainstem of the Missouri in South Dakota, it is desirable to retain and protect the Big Bend subarea as a deer habitat. The subarea will also probably become increasingly useful as shelter for antelope and upland game birds.

One of the most important livestock uses of the area is as a route from the plains headquarters and range areas to water and hay lands on the Cheyenne River. This use is probably more important to most operators than the limited grazing afforded within the breaks. The value of the "breaks" for livestock shelter is also highly regarded by the operators. During storm periods, feed is usually available in parts of the breaks due to variations in exposure and plant heights. It is important that the livestock use of the area should not interfere with the other uses and that such use will not cause erosion and sediment production.

Recommendations

It is recommended that public domain lands in the Big Bend subarea be retained in public ownership because of their important multiple-use values for watershed, wildlife, shelter, recreation, and grazing. Because of the limited proper stocking rate allowable if other values are to receive proper consideration, these lands cannot support taxation under private ownership under present taxing system. It is probable that continued livestock use of the public lands will be desirable, principally as a passage route.

Exchange of use agreements should be worked out which would utilize the public land as a base for wildlife use of the entire subarea. These agreements should also allow for entry of hunters to provide for the proper take so that the subarea will not become overstocked with deer. Use of the subarea should be carefully managed so that the surface resources are protected and so that erosion and sediment production are kept as low as feasible.

Multiple-use values of the subarea are greater than the livestock grazing values. The watershed values of public domain land in the Big Bend subarea are largely negative. The character of most of the precipitation, which is sudden, heavy, summer showers, results in excessive runoff and erosion of the steep slopes of readily erodible clay soil unless the surface is protected by vegetative cover and litter. The construction of Oahe and Fort Randall Dams make sediment production more important than formerly. Sediment from these breaks will go to fill the valuable storage space in the reservoirs created by these dams. On the basis of a reasonable valuation of reservoir capacity, prevention of sediment production may well be the highest value of these sites. Proper management which would provide ample cover and litter for conservation, wildlife use, and for the prevention of erosion and sediment production, would not be feasible under private ownership as the remaining use value for grazing would not support taxation. The multiple use values are so important to the State and Nation that the public lands should remain in public ownership. They should be managed for conservation and the proper use of these multiple values. It may be feasible to make some minor adjustments in landownership within the subarea whereby public land could be consolidated where multiple use values predominate and could be released where grazing value predominates. The Department of Fish, Game and Parks of the State of South Dakota has expressed their desire that these lands remain in public ownership and that they be administered for big game habitat and conservation.

PUBLIC DOMAIN LANDS OUTSIDE OF THE BIG BEND SUBAREA

The remaining public domain land that is not included within the townships making up the Big Bend subarea is scattered over all parts of the Lower Cheyenne drainage. There are nine concentrations of public domain lands in Haakon County and six in Stanley County as shown on the map of the Lower Cheyenne area on the South Dakota State map with this report. These concentrations occur in the rough "breaks" of the Cheyenne and Missouri Rivers and their tributaries. The same analysis and recommendations apply to these areas as is presented for the Big Bend subarea, except that smaller areas are involved. The areas in the Missouri "breaks" are especially important as they will provide deer habitat for the animals which will be deprived of their present habitat area when Oahe Dam is built. This is particularly true of the fairly large concentration in Stanley County south of Mission Ridge. Some of the public domain lands adjacent to the Missouri River will be within the high water line of the Oahe Reservoir.

There are 5, 057 acres of surplus land in the Fort Meade Military Reservation, near Sturgis in Meade County. This land has important multiple use values, especially for recreation and wildlife. Determination of the proper administrative agency is now under consideration. This land has timber and grass cover. It is adjacent to the Black Hills. U. S. Highway No. 14 and the Chicago and Northwestern Railroad cross this land. The Black Hills National Cemetery and Veterans' Hospital are within the area.

Much of the public domain land in the remaining area is in scattered 40 acre tracts. About 3, 200 acres distributed in all of the four counties making up the area are in localities that are devoted to a combination of dry-farming and grazing. Location and accessibility of these tracts as a rule is much better than the land located in the breaks. There is also more of an inclination on the part of adjacent landowners to be interested in acquiring control of this land. Only one single tract of 40 acres in Meade County was classified as agricultural land.

Due to the character and scattered location of these tracts, administration and management of them on the part of the Bureau of Land Management does not appear to be economical or feasible. Better utilization and more effective management could be obtained under private ownership, particularly if these lands were incorporated with and made a part of adjacent deeded land. It is therefore felt that in the public interest all of these isolated scattered tracts should be classified as suitable for disposal by public sale.

AREA PROBLEMS

The Lower Cheyenne area is a combination of dry-farming and grazing area. The public domain, even in localities outside of the river breaks, is suitable only for grazing. Indications point generally to much range deterioration and depletion in the past. Densities are low, the more desirable range plants have decreased in percentage amounts while invaders and inferior grass species have increased. It is difficult to convince most local stockmen that over-grazing played any part in bringing on this condition. Rather, they attribute it to the drought years of the thirties. There is no doubt that prolonged droughts result in over-grazing as a rule. Field examination indicates that in many individual cases there should be a reduction of grazing intensity in order to insure a safe, long time grazing capacity of the lands in this area, both public and private. This is more important than, and should undoubtedly come ahead of, such supplemental measures as seasonal use, fencing, stockwater development, reseeding, and range deferment.

In connection with the use of land in this part of South Dakota, a very noticeable thing is the uneven grazing of the livestock, which in the Lower Cheyenne is almost 100 percent cattle. The stock are not inclined to graze in the more inaccessible and rougher locations, and as a result they over-graze the more level areas, which are in the lower elevations as a rule. Additional fencing would probably alleviate this situation to a large extent. This would permit various stockmen to divide their holdings and to better adopt a system of rotation grazing. It would tend to reduce intermingling of herds. Additional fencing at this time raises the question as to whether the poorer type of this land would justify much fencing because of the current high cost of construction for the limited capacity available.

Due to a cycle of more than ten years of average or better rainfall preceding 1951, evidence of the drought years of the thirties is being eliminated. Vegetation has improved in quality and quantity. The problem of excessive runoff and sedimentation still remains. Most of the slopes of the draws are steep and some even precipitous. Much of the moisture falls in the form of brief, hard thunder showers over limited areas and the runoff causes both additional gullying and sediment production. Local stockmen are almost unanimous in opposition to the construction of stockwater dams in the breaks or even near their tops because of so few favorable sites being available both from topographic and administration standpoints. The dams even in such locations frequently silt up in one year's time.

Additional stockwater development is a real need for this area, both on government and privately owned lands. At the present time, most stockmen utilizing the breaks depend to a large extent upon the rivers for their water supply. Away from the breaks where conditions are more favorable, the program of the Production Marketing Administration has resulted in dams in sufficient numbers being constructed so that a supply of stockwater is not the problem it formerly was. Any additional dams should probably be constructed in the lower portion of the breaks even to the loss of some grazing potential. This recommendation is made so that the disturbance of grass balance in the upper portions of the breaks would be minimized. Years of good moisture conditions have tended to stabilize erosion in the upper portions of the breaks. Dams in the lower portions of the breaks will reduce channel cutting and gullying in the draws which is very widespread and serious in many places. In addition, there are a number of situations along both the Cheyenne and Belle Fourche Rivers where these dams could furnish a supply of water for spreading over narrow strips of bottom hay lands. A number of such developments are already in existence on privately owned land. Likewise, these dams will prevent the sediment from constantly being deposited fan-like on the bottom lands.

Most operators, particularly the larger ones, produce hay in varying amounts for winter feed. Unfortunately, there is a minority which depend upon range forage for winter feeding. These usually are small operators. Hardships result when winters are as severe as those of 1949 and 1951-52. Even the shelter of the river breaks does not provide a sufficiency of roughage and it becomes necessary to use various supplements. At such times, it is often difficult to secure needed hay or concentrates. Should a recurrence of severe drought conditions occur, this condition will become greatly aggravated.

Only a partial solution of this situation appears at this time. Those stockmen who own bottom land along the rivers and creeks should attempt to develop more hay land aided by waterspreading or irrigation wherever feasible. Even under such conditions, however, according to Bureau of Reclamation soil scientists who made field surveys during the 1951 season, difficulties may arise a few years later from an accummulation of salts and by damage to the soil structure. Further study might reveal that hay could be cut on a small amount of additional upland, particularly with the improvement of hay harvesting machinery in recent years. At the present time, alfalfa is produced to a small extent on both irrigated and dry land with varying degrees of success. Additional plantings of this crop offers some prospect of increasing the local supply of winter feeds. Some operators could produce grain or grain-legume hay in place of producing grain. Cane and sudan grass can also be raised with very little precipitation.

On a number of locations some very large and heavy infestations of prairie dogs were found. These were on both bottom lands and on some of the little plateaus at the upper ends of the breaks. These prairie dog towns were the largest in size and population that the examiner had ever seen. These infestations were on both public and private land. Apparently very little, if anything, has been done in the past in an attempt to control this situation. When landowners were interviewed in regard to the seriousness of this matter, one would say that he baited in the past but his adjacent neighbor did not. Later when this neighbor was similarly questioned, he would tell the same story. There is a very definite and serious need of a coordinated extermination as well as follow-up program being instituted at the earliest possible date to alleviate this situation both within the Big Bend subarea and in scattered locations throughout the entire Lower Cheyenne area.

Multiple-Use

The breaks where the larger part of the public domain is located offer no inducement for the development of small tracts, as the characteristics which people look for in such tracts as good building sites, woods, domestic water, recreation, hunting, and fishing are not available. Hunting possibilities will increase as white-tail deer have become increasingly numerous in recent years. Up to 1952 they enjoyed protection. The open season of 1952 resulted in excellent hunter's success. The area affords habitat for important populations of sharp-tailed grouse.

Some pheasants and waterfowl utilize the subarea. The larger blocks of public domain land afford a base habitat for game, especially with the intervening privately owned lands.

The breaks offer shelter and protection as well as grazing for both livestock and wild game and using the public domain lands of this type for that purpose appears to be their highest use at the present time. Antelope are found in fairly large numbers in the most open type country in Pennington and Meade Counties. There is now a short antelope hunting season in most parts of western South Dakota. The relatively few scattered tracts of public domain in the antelope country furnishes its share of forage for this animal.

Future administration and management is a problem, both as to the Big Bend subarea as well as the remaining land outside of the subarea within the boundaries of the Lower Cheyenne. The problem resolves itself to either retention by the Federal government or disposition through legal procedures. It might be well to present some of the arguments for and against retention by the government of the lands in question. Against disposing of this land, it has been stated that if economic conditions again become depressed a large part of this land undoubtedly would be foreclosed for taxes, thus adding to the burdens of the several counties. Local people who have made a study of the conditions which brought so much distress to this area in the thirties are generally convinced that the chance of a repetition in the future is much reduced. They point out that the landownership is now in much stronger hands; that the ranch units are considerably larger; and that the years of good prices have permitted most stockmen not only to become debt-free, but to build up some financial reserves. Drought was also a big factor during the depression years, and it is now thought that the many years of stockwater development will greatly reduce this possibility unless there are periods of prolonged droughts. A further factor that may alleviate this condition in the future is artificial rain making, which was tried out in this area for the first time in 1951. It is generally believed that the efficacy of this practice has yet to be established.

This land is at the present time practically 100 percent under grazing lease to local stockmen. Rentals are considerably lower than those on both privately owned and other types of publicly owned lands in the same area. In effect, this amounts to a subsidy to the stockmen concerned and is so recognized by them. Many frankly admit that it is far cheaper to lease than to own such land and state that they will continue leasing it as long as they can. A few stockmen state that they are not in financial condition to purchase this land and that its sale to any other individual would seriously cripple their operations.

Scattered tracts of public domain land are expensive and difficult to properly administer in relation to the income derived therefrom. Another argument frequently heard is that its sale would place this land on the public tax rolls. Still another reason advanced for disposing of this land is that stockmen are now in better condition financially than they have been for a long time and therefore can better afford to purchase this land, which in most cases will block out and consolidate their holdings.

As is the case of all rivers of any size in the Missouri Basin, there are numerous tracts of public domain designated as lots along both the Cheyenne and Belle Fourche Rivers. These range in size from a fraction of an acre to better than forty acres. Very few of these lots are still in the size and shape that the original survey maps show them. Some have been washed away in their entirety and are now sand bars frequently on the opposite side of the river. In other cases, through accretion, these lots have been built up to several times their original size. However, this accreted land as a rule is far from first class land at the present time, the soil usually being very sandy and the vegetation sparse. Thus, it is generally not suitable for development into bottom hay land even though water for spreading or irrigation may be available. Most adjacent landowners are not interested in purchasing a very small tract of what frequently may be sub-standard land and which is inaccessible except across land they already control. This is particularly true if the lot is nothing but a sand bar in a river. Some landowners, however, recognize the value and importance of cleaning up a small piece of non-owned land within their holdings and are willing to apply to buy the same. This appears to be the best argument to use in a program of disposing of this type of land. Many years may elapse before all of such land is disposed of. Some stockmen may not be interested in purchasing standard size isolated tracts of even the better type of grazing land in cases where their privately owned land largely or entirely surrounds the public domain lands. Appraisal prices placed on this government land will have an important bearing in such cases.

It appears to be in the public interest to initiate a disposal program of all isolated tracts of public domain lands in the Lower Cheyenne area which do not have important public values. Lands with important multiple-use values, especially those in blocks or non-isolated, should be retained in public ownership to protect wildlife and watershed values.

Field investigation revealed that several tracts of public domain will be partially flooded upon the completion of the Oahe Dam on the Missouri River just above Pierre, South Dakota. No other project planned at present will effect any government owned land in this particular area. The various isolated tracts are so located and scattered and are of such character that their continued adequate administration and management is not economical or feasible by the Bureau of Land Management as at present provided with funds and personnel. These lands are largely best suited to grazing. Private ownership will best provide for the maximum utilization of these lands and such status will not be contrary to the general public interest, except possibly in cases where an occasional individual tract may have been classified otherwise.

Over half of the public domain lands in the Lower Cheyenne area are rough lands located in blocks or grouped so that they are not isolated tracts. These lands have important watershed and wildlife values. If these values are properly managed and conserved, the present public domain of this type could not support adequate taxation. Therefore, it is considered best that these lands remain in public ownership.

Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne River Area, South Dakota, by Counties, 1953 1/

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Butte County									
8	7	1	Lots 1,2,3,4, S½N½	284.43	Gently rolling to undulating	Grazing	VI	Multiple	Federal
	8	2	Lots 1,2,3,4, SW¼NE¼, S½NW¼, SW¼	402.04	Undulating and rough	Grazing	VI	Grazing	Private
		6	Lot 2, SE¼NE¼, S½SW¼, SW¼NE¼, SE¼	341.65	Rolling	Grazing	VI	Grazing	Private
		22	NW¼NW¼	40.00	Rolling	Grazing	VI	Grazing	Private
	9	2	SE¼	160.00	Rolling	Grazing	VI	Grazing	Private
		5	Lots 2,3,4, S½N½, S½	570.66	Rolling to rough and undulating	Grazing	VI	Multiple	Federal
		7	Lots 2,3,4, E½W½, SE¼	410.66	Rolling to rough and undulating	Grazing	VI	Multiple	Federal
		8	SW¼	160.00	Rolling to rough and undulating	Grazing	VI	Multiple	Federal
		11	SE¼	160.00	Rolling	Grazing	VI	Grazing	Private
		12	SW¼	160.00	Rolling	Grazing	VI	Grazing	Private
		18	NE¼NW¼	40.00	Rolling to rough and undulating	Grazing	VI	Multiple	Federal
		25	SE¼	160.00	Rolling	Grazing	VI	Grazing	Private
		30	E½SE¼, SW¼SE¼	120.00	Rolling	Grazing	VI	Grazing	Private
		31	Lot 1	30.18	Rolling	Grazing	VI	Grazing	Private
		32	E½SW¼	80.00	Rolling	Grazing	VI	Grazing	Private
		34	W½SE¼	80.00	Rolling	Grazing	VI	Grazing	Private
9	7	13	E½	320.00	Gently to steeply rolling	Grazing	VI	Multiple	Federal
		24	E½	320.00	Gently to steeply rolling	Grazing	VI	Multiple	Federal
		25	NE¼	160.00	Gently to steeply rolling	Grazing	VI	Multiple	Federal
	8	1	SW¼NE¼	40.00	Rolling	Grazing	VI	Multiple	Federal
		2	Lot 2	45.23	Undulating	Grazing	VI	Grazing	Private
		6	Lot 1	43.21	Undulating	Grazing	VI	Grazing	Private
		12	SE¼	160.00	Rolling	Grazing	VI	Grazing	Private
		13	NE¼NE¼	40.00	Rolling to undulating	Grazing	VI	Grazing	Private
		23	S½SE¼ (Stock Driveway)	80.00	Undulating	Grazing	VI	Multiple	Federal
		14	NE¼, NW¼SE¼, SE¼SW¼	240.00	Rolling to undulating	Grazing	VI	Grazing	Private
		15	SE¼NW¼ (Stock Driveway)	40.00	Undulating	Grazing	VI	Multiple	Federal

-Continued

Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain
Within the Lower Cheyenne River Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Butte County									
9	8	23	N½NW¼	80.00	Rolling to undulating	Grazing	VI	Grazing	Private
		26	S½SW¼	80.00	Undulating and rough	Grazing	VI	Grazing	Private
		29	E½NE¼	80.00	Rolling to rough	Grazing	VI	Grazing	Private
9	9	5	SE¼	160.00	Undulating	Grazing	VI	Grazing	Private
		7	Lots 2,3,4, SE¼NW¼	129.80	Undulating	Grazing	VI	Grazing	Private
		8	NW¼NE¼	40.00	Undulating	Grazing	VI	Grazing	Private
		9	E½NE¼	80.00	Undulating	Grazing	VI	Grazing	Private
		10	W½SW¼	80.00	Undulating	Grazing	VI	Grazing	Private
		18	Lots 1,2	62.12	Undulating	Grazing	VI	Grazing	Private
		21	W½NE¼ (Bombing Range)	480.00	Undulating	Grazing	VI	Grazing	Private
		22	Lots 1, 8	40.00	Undulating	Grazing	VI	Grazing	Private
		28	W½, NE¼ (Bombing Range)	480.00	Undulating	Grazing	VI	Grazing	Private
		29	SE¼ (Bombing Range)	160.00	Undulating	Grazing	VI	Grazing	Private
		31	E½, E½SW¼, Lots 3,4 (Bombing Range)	478.70	Undulating	Grazing	VI	Grazing	Private
		32	W½SW¼, SE¼SW¼ (Bombing Range)	120.00	Undulating	Grazing	VI	Grazing	Private
		33	NE¼SW¼ (Bombing Range)	40.00	Undulating	Grazing	VI	Grazing	Private
		35	NE¼, N½S½	320.00	Undulating	Grazing	VI	Grazing	Private
10	8	1	Lot 4, SW¼NW¼, SE¼NW¼	127.58	Undulating	Grazing	VI	Grazing	Private
		3	SW¼NW¼	40.00	Undulating	Grazing	VI	Grazing	Private
		6	Lots 3,4, SE¼SW¼, SW¼SE¼	167.65	Rough and undulating	Grazing	VI	Grazing	Private
		7	Lots 1,2, SE¼, SE¼NE¼	287.69	Rough and undulating	Grazing	VI	Grazing	Private
		15	NE¼	160.00	Undulating	Grazing	VI	Grazing	Private
		17	NE¼NW¼	40.00	Rough and undulating	Grazing	VI	Grazing	Private
		18	Lots 1,2,3,4, E½W½, N½NE¼	415.80	Rough and undulating	Grazing	VI	Grazing	Private
		21	SE¼	160.00	Undulating	Grazing	VI	Grazing	Private
		31	Lots 1,2,3,4	173.80	Undulating	Grazing	VI	Grazing	Private
	9	19	Lot 4	23.33	Level	Grazing	VI	Grazing	Private
		28	NE¼SE¼	40.00	Rolling	Grazing	VI	Grazing	Private
		32	E½SW¼	80.00	Rolling	Grazing	VI	Grazing	Private

-Continued

Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne River Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Butte County									
11	7	1	SW¼NE¼	40.00	Undulating	Grazing	VI	Grazing	Private
		2	SW¼NW¼, NW¼SW¼	80.00	Undulating	Grazing	VI	Grazing	Private
		34	N½SE¼	80.00	Undulating and rough	Grazing	VI	Grazing	Private
	8	15	NW¼SW¼	40.00	Undulating	Grazing	VI	Grazing	Private
		19	Lot 1, NE¼NW¼	83.13	Rolling	Grazing	VI	Grazing	Private
		22	S½SE¼	80.00	Undulating	Grazing	VI	Grazing	Private
		26	S½SE¼	80.00	Undulating	Grazing	VI	Grazing	Private
		27	N½NE¼	80.00	Undulating	Grazing	VI	Grazing	Private
		28	SE¼	160.00	Undulating	Grazing	VI	Grazing	Private
		30	E½, NE¼SW¼	360.00	Rolling	Grazing	VI	Grazing	Private
		31	Lots 1,2,3,4, E½NW¼	255.20	Rolling	Grazing	VI	Grazing	Private
		33	SW¼SW¼	40.00	Undulating	Grazing	VI	Grazing	Private
		34	W½	320.00	Undulating	Grazing	VI	Grazing	Private
12	7	28	NE¼SW¼	40.00	NOT EXAMINED				
		35	SE¼NE¼, NE¼SW¼	80.00	NOT EXAMINED				
Haakon County									
5	18	1	Lots 1,2, S½NE¼	160.04	Steeply rolling	Grazing	VII	Grazing	Private
		8	E½SE¼	80.00	Rolling	Grazing	VII	Grazing	Private
		12	SE¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		13	NE¼NE¼, NW¼, W½SW¼, NE¼SE¼	320.00	Rolling	Grazing	VII	Grazing	Private
		14	NE¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
	19	18	Lot 3, NE¼SW¼	80.54	Steeply rolling	Grazing	VI	Grazing	Private
	21	11	SW¼SE¼	40.00	Steeply rolling	Grazing	VII	Grazing	Private
		13	NW¼NE¼, E½SE¼, E½SW¼	200.00	Steeply rolling	Grazing	VII	Grazing	Private
		14	NE¼NW¼	40.00	Steeply rolling	Grazing	VII	Grazing	Private
		18	E½SE¼	80.00	Rolling	Grazing	VII	Grazing	Private
	22	6	SE¼	160.00	Rough	Grazing	VII	Grazing	Private

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne River Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Haakon County									
6	18	2	Lot 1	40.41	Rough				
		6	Lots 4,5	68.90	Level gravel bar (22.74), Rough (46.16)	Grazing	VII	Grazing	Private
		18	Lot 4	37.13	Rough	Grazing	VII	Grazing	Private
		19	Lots 1,4, SE¼SW¼	115.53	Rough	Grazing	VII	Grazing	Private
		22	NW¼NE¼	40.00	Level to rough	Grazing	VII	Grazing	Private
		26	SE¼SW¼	40.00	Rough	Grazing	VII	Grazing	Private
		30	Lots 1,2,3, E½NW¼, NE¼SW¼, SW¼NE¼	274.14	Rough	Grazing	VII	Grazing	Private
		31	SE¼NE¼	40.00	Rough	Grazing	VII	Grazing	Private
		32	S½NW¼	80.00	Rough	Grazing	VII	Grazing	Private
	19	1	Lot 3, SE¼NW¼	79.68	Rough and broken	Grazing	VII	Grazing	Private
		3	Lot 2	39.58	Rough and broken	Grazing	VII	Grazing	Private
		5	E½SE¼	80.00	Rough and broken	Grazing	VII	Grazing	Private
		6	Lots 3,4	79.71	Rough and broken	Grazing	VII	Grazing	Private
		8	NW¼	160.00	Rough and broken	Grazing	VII	Grazing	Private
		12	N½NE¼, N½SW¼	160.00	Rough and broken	Grazing	VII	Grazing	Private
		13	SE¼NE¼, N½SE¼	120.00	Rough and broken	Grazing	VII	Grazing	Private
		20	E½NE¼	80.00	Rough and broken	Grazing	VII	Grazing	Private
		25	SE¼NE¼, NE¼SE¼	80.00	NOT EXAMINED				
	20	18	Lots 2,3,4, NE¼SW¼, NW¼SE¼	194.45	Rough and broken	Grazing	VII	Grazing	Private
		19	Lots 1,4, E½NW¼	156.94	Rough and broken	Grazing	VII	Grazing	Private
		30	Lots 1,2, E½NW¼	157.40	Rough and broken	Grazing	VII	Grazing	Private
		31	NE¼NE¼	40.00	Rough and broken	Grazing	VII	Grazing	Private
	21	26	NE¼NE¼	40.00	Rough	Grazing	VII	Grazing	Private
	22	11	SW¼SE¼	40.00	Rough	Grazing	VII	Grazing	Private
		13	E½NE¼	80.00	Rolling	Grazing	VII	Grazing	Private
		14	NE¼	160.00	Rolling	Grazing	VII	Grazing	Private
	23	19	SE¼NE¼, NE¼SE¼	80.00	Steeply rolling	Grazing	VII	Grazing	Private
7	18	26	Lots 1,2,3,4	91.00	Level-sand bar	Grazing	VIII	Grazing	Private

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne River Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Haakon County									
7	18	31	Lots 6,7,8, N½SE¼	147.90	Level-sand bar	Grazing	80/VII: 67.90/VIII	Grazing	Private
		32	Lot 4	14.90	Level-sand bar	Grazing	VIII	Grazing	Private
	19	25	Lots 1,2,3, SE¼NE¼, E½SE¼	209.30	Level to rough	Grazing	80.30/VI: 120/VII	Grazing	Private
		26	Lots 2,3,4, SE¼SE¼	101.50	Level to rough	Grazing	VII	Grazing	Private
		30	Lot 1	21.80	Level-sand bar	Grazing	VII	Grazing	Private
		32	Lots 1,3	37.90	Level-sand bar	Grazing	VIII	Grazing	Private
		33	S½SE¼	80.00	Rough and broken	Grazing	VII	Grazing	Private
		34	S½SW¼	80.00	Rough and broken	Grazing	VII	Grazing	Private
		34	Lot 1	23.40	Level-sand bar	Grazing	VIII	Grazing	Private
	20	11	Lots 5,6,7	83.90	Level-sand bar	Grazing	VIII	Grazing	Private
		12	Lots 1,2	92.20	Level	Grazing	VII	Grazing	Private
		13	NE¼	160.00	Rough	Grazing	VII	Grazing	Private
		14	W½SW¼, NE¼SW¼, SE¼NW¼	160.00	Rough and broken	Grazing	VII	Grazing	Private
		15	SW¼SW¼	40.00	Rough and broken	Grazing	VII	Grazing	Private
		17	Lot 5	29.50	Level-sand bar	Grazing	VIII	Grazing	Private
		19	SE¼SW¼, S½SE¼	120.00	Rough and broken	Grazing	VII	Grazing	Private
		20	SW¼SW¼	40.00	Rough and broken	Grazing	VII	Grazing	Private
		24	NE¼SE¼	40.00	Rolling	Grazing	VI	Grazing	Private
		26	NW¼NW¼, SE¼NW¼, NE¼SW¼, SW¼SE¼	160.00	Broken	Grazing	VII	Grazing	Private
		29	NW¼SW¼, NE¼SE¼	80.00	Rough	Grazing	VII	Grazing	Private
		30	Lots 1,2,3,4, E½W½, NE¼, W½SE¼	542.48	Rough and broken	Grazing	VII	Grazing	Private
		35	SE¼SE¼	40.00	Steeply rolling	Grazing	VII	Grazing	Private
	21	8	Lot 2	29.90	Level	Grazing	VII	Grazing	Private
		10	Lot 1	13.50	Level-sand bar	Grazing	VIII	Grazing	Private
		11	Lot 1	0.09	Level-sand bar	Grazing	VIII	Grazing	Private
		18	Lot 5	33.60	Rough	Grazing	VII	Grazing	Private
		19	Lots 3,4, SE¼SW¼, S½SE¼, NE¼SE¼, SE¼NE¼	268.60	Rolling to rough	Grazing	VII	Multiple	Federal

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne River Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Haakon County									
7	21	20	N½SW¼	80.00	Rolling to rough	Grazing	VII	Multiple	Federal
		22	S½NE¼, SE¼, E½SW¼	320.00	Rough and broken	Grazing	VII	Multiple	Federal
		23	N½SW¼, SW¼NW¼, S½NE¼, N½SE¼, SE¼SE¼	320.00	Rough and broken	Grazing	VII	Multiple	Federal
		24	NW¼SW¼	40.00	Rough and broken	Grazing	VII	Multiple	Federal
		26	NE¼NE¼	40.00	Rough and broken	Grazing	VII	Multiple	Federal
		27	E½NE¼	80.00	Rough and broken	Grazing	VII	Multiple	Federal
		29	NW¼SW¼	40.00	Rolling	Grazing	VII	Multiple	Federal
		30	NE¼SE¼	40.00	Rolling	Grazing	VII	Multiple	Federal
		30	Lots 1,2, E½NW¼, N½NE¼	228.81	Rolling to rough	Grazing	VII	Multiple	Federal
	22	8	NE¼SE¼	40.00	Rough	Grazing	VII	Grazing	Private
		14	NW¼NE¼	40.00	Rough	Grasing	VII	Grazing	Private
		17	S½, NW¼	480.00	Rough	Grazing	VII	Multiple	Federal
		18	SE¼	160.00	Rough	Grazing	VII	Multiple	Federal
		19	E½, E½W½	480.00	Rough	Grazing	VII	Multiple	Federal
		20	S½SE¼	80.00	Rough	Grazing	VII	Multiple	Federal
		21	SW¼	160.00	Rough	Grazing	VII	Multiple	Federal
		27	NE¼SE¼	40.00	Rough	Grazing	VII	Grazing	Private
		28	SW¼NW¼	40.00	Rough	Grazing	VII	Grazing	Private
		29	NE¼SE¼, W½SE¼, NE¼SW¼	160.00	Rough	Grazing	VII	Multiple	Federal
	23	5	SW¼NE¼	40.00	Steeply rolling	Grazing	VII	Grazing	Private
		5	SE¼SW¼, SW¼NW¼, W½SW¼	160.00	Steeply rolling	Grazing	VII	Grazing	Private
	24	5	Lot 1, SW¼NW¼, NW¼SW¼	120.17	Steeply rolling	Grazing	VII	Grazing	Private
		9	SE¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
8	22	13	Lot 6	7.30	Level-sand bar	Grazing	VIII	Multiple	Federal
		21	Lot 1	12.70	Level-sand bar	Grazing	VIII	Multiple	Federal
		22	Lot 1	26.40	Level-sand bar	Grazing	VIII	Multiple	Federal
		23	E½SE¼, SW¼SE¼	120.00	Level to rough	Grazing	VII	Grazing	Private
		24	NE¼NE¼, S½NE¼, NW¼SE¼	160.00	Level to rough	Grazing	VII	Grazing	Private
		27	Lot 2	21.30	Level-sand bar	Grazing	VII	Multiple	Federal

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne River Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Haakon County									
8	23	5	Lot 2	28.10	Level-sand bar	Grazing	VIII	Multiple	Federal
		13	SW¼NE¼, W½SE¼	120.00	Sharply rolling	Grazing	VII	Grazing	Private
		14	SE¼, W½NW¼	240.00	Sharply rolling	Grazing	VII	Grazing	Private
		17	Lot 4	22.90	Level-accreted	Grazing	VII	Multiple	Federal
		18	Lots 7,8	13.80	Level-accreted	Grazing	VII	Multiple	Federal
		20	SW¼NW¼, W½SW¼, SE¼SW¼, SW¼SE¼	200.00	Rough	Grazing	VII	Grazing	Private
		28	NW¼NW¼	40.00	Rough	Grazing	VII	Grazing	Private
		29	NE¼NW¼	40.00	Rough	Grazing	VII	Grazing	Private
		[illegible]	W½NW¼	80.00	Rough	Grazing	VII	Grazing	Private
		35	Lot 2	37.39	Rough	Grazing	VII	Grazing	Private
8	24	1	Lots [illegible], SW¼ [illegible]	359.[illegible]	Rough	Grazing	VII	Grazing	Private
		[illegible]	S½NE¼, [illegible]	120.00	Steeply rolling	Grazing	VII	Multiple	Federal
		[illegible]	S½[illegible]	80.00	Rough	Grazing	VII	Multiple	Federal
		[illegible]	Lot [illegible]	42.[illegible]	Level	Grazing	[illegible]	Multiple	Federal
		[illegible]	W½NE¼, [illegible]	160.00	Rough	Grazing	VII	Grazing	Private
		7	W½SW¼, [illegible]	120.00	Rough	Grazing	VII	Grazing	Private
		10	W½NE¼	80.00	Rough	Grazing	VII	Grazing	Private
		11	NW¼NW¼	40.00	Rough	Grazing	VII	Grazing	Private
		17	E½NE¼	80.00	Rough	Grazing	VII	Grazing	Private
		24	S½SE¼	80.00	Rolling	Grazing	VII	Grazing	Private
		27	SE¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		33	NW¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
9	24	12	Lot 1	9.05	Level-sand bar	Grazing	VIII	Multiple	Federal
		13	Lots 2,3,4	34.30	Level-sand bar	Grazing	VIII	Multiple	Federal
		24	SW¼SE¼	40.00	Rough	Grazing	VII	Multiple	Federal
		25	NW¼NE¼	40.00	Rough	Grazing	VII	Multiple	Federal
		26	SW¼	160.00	Steeply rolling to rough	Grazing	VII	Multiple	Federal
		35	W½	320.00	Steeply rolling to rough	Grazing	VII	Multiple	Federal

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Meade County									
2	12	9	SW¼SE¼	40.00	NOT EXAMINED				
	14	2	Lot 4, SW¼NW¼	81.52	Rough	Grazing	VII	Grazing	Private
		3	SE¼NE¼, SE¼	200.00	Rough	Grazing	VII	Grazing	Private
		10	E½	320.00	Rough	Grazing	VII	Grazing	Private
		11	Lot 5	16.70	Level-sand bar	Grazing	VII	Grazing	Private
		13	Lot 1	25.90	Level-sand bar	Grazing	VII	Grazing	Private
		14	Lot 3	38.50	Rough	Grazing	VII	Grazing	Private
3	10	34	SE¼NW¼	40.00	Rolling	Grazing	VI	Grazing	Private
	12	12	S½NE¼	80.00	Level to rough	Grazing	VII	Grazing	Private
	14	11	S½SW¼, NE¼SW¼	120.00	Rough	Grazing	VII	Grazing	Private
		15	SE¼SE¼	40.00	Rough	Grazing	VII	Grazing	Private
		21	SE¼	160.00	Rough	Grazing	VII	Grazing	Private
		22	E½SW¼, W½SE¼	160.00	Rough	Grazing	VII	Grazing	Private
4	5	1	S½SE¼	80.00	Rough	U. S. Forest Service	VII	U. S. Forest Service	Federal
	9	2	SE¼SW¼	40.00	Steeply rolling	Grazing	VII	Grazing	Private
		11	NE¼NW¼, SW¼NW¼	80.00	Steeply rolling	Grazing	VII	Grazing	Private
		21	NW¼NE¼, NW¼SE¼	80.00	Rolling	Grazing	VI	Grazing	Private
		22	NW¼NW¼	40.00	Rolling	Grazing	VI	Grazing	Private
	10	1	Lot 6	0.25	Island-level	Grazing	VII	Grazing	Private
		2	S½S½	160.00	Rough	Grazing	VII	Multiple	Federal
		3	SE¼SW¼	40.00	Rough	Grazing	VII	Multiple	Federal
		4	Lots 2,3	89.40	Rough	Grazing	VII	Multiple	Federal
		8	SE¼NE¼	40.00	Rough	Grazing	VII	Multiple	Federal
		9	E½E½	160.00	Rough	Grazing	VII	Multiple	Federal
		10	W½, SW¼SE¼	360.00	Rough	Grazing	VII	Multiple	Federal
		15	W½NW¼	80.00	Rough	Grazing	VII	Multiple	Federal
		20	NE¼	160.00	Rolling	Grazing	VII	Grazing	Private
	11	2	S½SE¼, SE¼SW¼	120.00	Rolling	Grazing	VII	Grazing	Private

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Meade County									
4	11	5	NW¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		10	NE¼NW¼	40.00	Rough	Grazing	VII	Grazing	Private
		15	N½, SW¼	480.00	Rough	Grazing	VII	Grazing	Private
	12	1	SW¼NE¼, SE¼NW¼, Lot 3	133.72	Rough	Grazing	VII	Grazing	Private
		2	Lot 1,4	108.57	Rough	Grazing	VII	Grazing	Private
		3	S½NE¼	80.00	Rough	Grazing	VII	Grazing	Private
		4	SW¼, W½SE¼	240.00	Broken	Grazing	VII	Grazing	Private
		5	Lot 1, SE¼NE¼	93.96	Broken	Grazing	VII	Grazing	Private
		8	NE¼NE¼	40.00	Broken	Grazing	VII	Grazing	Private
		9	NE¼NW¼, NW¼NE¼	80.00	Broken	Grazing	VII	Grazing	Private
	13	2	S½SW¼	80.00	Rough	Grazing	VII	Grazing	Private
		2	Lots 3,4, S½NW¼	190.56	Rough	Grazing	VII	Grazing	Private
		3	Lots 1,2,3, SE¼NE¼, SE¼SE¼	245.72	Rough	Grazing	VII	Grazing	Private
	14	1	SE¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		22	SE¼SE¼	40.00	Rough	Grazing	VIII	Grazing	Private
		23	SW¼SW¼	40.00	Rough	Grazing	VII	Grazing	Private
		25	Lots 1,2,3	65.10	Level-sand bar	Grazing	VII	Grazing	Private
5	8	1	S½S½	160.00	Rolling	Grazing	VII	Grazing	Private
		12	NW¼NW¼, E½W½, SW¼SE¼	240.00	Rolling	Grazing	VII	Grazing	Private
		13	NE¼NW¼, NW¼NE¼, W½SE¼, SE¼SE¼	200.00	Rolling	Grazing	VII	Grazing	Private
	9	6	Lot 10	16.10	Level-sand bar	Grazing	VII	Grazing	Private
		17	NE¼SW¼	40.00	Choppy	Grazing	VII	Grazing	Private
	10	32	Lot 9	9.10	Level	Grazing	VI	Grazing	Private
	11	22	NE¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		33	Lots 10, 11	7.60	Level	Grazing	VIII	Grazing	Private
		34	Lot 2	9.60	Level	Grazing	VII	Grazing	Private
	12	25	Lot 5	8.20	Rough	Grazing	VII	Grazing	Private
		26	Lots 10, 11	22.90	Level	Grazing	VIII	Grazing	Private

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Meade County									
5	12	32	Lots 2,3	30.90	Level-sand bar	Grazing	VII	Grazing	Private
		32	NE¼SE¼	40.00	Rough	Grazing	VII	Grazing	Private
	13	2	Lots 3,4, S½SW¼	159.64	Rough	Grazing	VII	Grazing	Private
		3	Lots 1,2, S½NE¼, E½SE¼	239.73	Rough	Grazing	VII	Grazing	Private
		6	SW¼NE¼	40.00	Rough	Grazing	VII	Grazing	Private
		8	E½W½	160.00	Rough	Grazing	VII	Grazing	Private
		10	E½NE¼	80.00	Rough	Grazing	VII	Grazing	Private
		11	NW¼	160.00	Rough	Grazing	VII	Grazing	Private
		12	NE¼	160.00	Rough	Grazing	VII	Grazing	Private
		13	E½SE¼	80.00	Rough	Grazing	VII	Grazing	Private
		15	NW¼SE¼	40.00	Rough	Grazing	VII	Grazing	Private
		22	Lot 2	8.90	Level-sand bar	Grazing	VII	Grazing	Private
		22	Lots 4,5, NW¼SW¼	115.48	Rough	Grazing	VII	Grazing	Private
		30	Lot 8	8.70	Level-sand bar	Grazing	VIII	Grazing	Private
		34	N½, SE¼	480.00	Rough	Grazing	VII	Grazing	Private
	14	6	Lot 7	35.79	Rolling	Grazing	VII	Grazing	Private
		12	Lot 1	18.20	Rough	Grazing	VII	Grazing	Private
		21	Lot 8,9	34.00	Rolling	Grazing	VI	Grazing	Private
		22	Lot 5	3.20	Level	Grazing	VI	Grazing	Private
		22	SE¼NW¼, S½NE¼, NE¼SE¼	160.00	Rough	Grazing	VII	Grazing	Private
		23	N½SW¼, W½SE¼	160.00	Rough	Grazing	VII	Grazing	Private
6	8	29	SE¼	160.00	Rolling	Grazing	VI	Grazing	Private
		32	NE¼	160.00	Rolling	Grazing	VI	Grazing	Private
	9	33	SE¼SW¼	40.00	Rolling	Grazing	VII	Grazing	Private
	11	30	E½E½	160.00	Sharply rolling	Grazing	VII	Grazing	Private
		31	E½NE¼, NW¼NE¼	120.00	Sharply rolling	Grazing	VII	Grazing	Private
		32	SW¼NW¼	40.00	Sharply rolling	Grazing	VII	Grazing	Private
	12	12	NW¼SW¼	40.00	Rolling	Grazing	VI	Grazing	Private
7	5	35	NE¼NW¼	40.00	Rough	Grazing	VII	Grazing	Private
	7	1	Lots 1,2, S½NE¼	159.64	Rolling	Grazing	VII	Grazing & Agriculture	Private

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Meade County									
7	7	2	Lot 3	39.19	Level	Grazing	VI	Grazing & Agriculture	Private
		12	N½NE¼	80.00	Level	Grazing	VII	Grazing	Private
		14	S½SW¼	80.00	Rolling	Grazing	VI	Grazing	Private
		15	SE¼SE¼	40.00	Rolling	Grazing	VI	Grazing	Private
		22	E½NE¼	80.00	Rolling	Grazing	VI	Grazing	Private
		23	NW¼	160.00	Rolling	Grazing	VI	Grazing	Private
	8	6	Lots 1,2,3,4,5,6,SE¼ S½NE¼, SE¼NW¼, E½SW¼	588.63	Rolling	Grazing	VII	Grazing	Private
		7	Lot 1, NE¼NW¼, N½NE¼	156.92	Rolling	Grazing	VII	Grazing	Private
		8	N½N½, SE¼NW¼, S½NE¼	280.00	Rolling	Grazing	VII	Grazing	Private
		7	Lot 6	11.62	Level-sand bar	Grazing	VII	Grazing	Private
		7	Lots 7,8,9	69.56	Level	Grazing	VI	Grazing	Private
		18	NW¼SE¼	40.00	Level	Agriculture	II	Agriculture	Private
		22	SE¼NW¼	40.00	Broken	Grazing	VII	Grazing	Private
	9	4	Lot 3, SE¼NW¼	79.81	Rolling	Grazing	VI	Grazing	Private
		12	SE¼	160.00	Rolling	Grazing	VII	Grazing	Private
		13	NE¼	160.00	Rolling	Grazing	VII	Grazing	Private
		20	NW¼NE¼	40.00	Sloping	Grazing	VI	Grazing	Private
	10	8	SE¼SW¼	40.00	Rolling	Grazing	VII	Grazing	Private
		12	NE¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		15	W½SE¼	80.00	Rolling	Grazing	VII	Grazing	Private
		17	SE¼SW¼	40.00	Rolling	Grazing	VII	Grazing	Private
		19	Lots 1,2,3,4, E½W½, S½NE¼, W½SE¼	458.59	Rough	Grazing	VII	Grazing	Federal
		20	SW¼NW¼	40.00	Rough	Grazing	VII	Grazing	Private
		22	NW¼	160.00	Rough	Grazing	VII	Grazing	Private
		27	N½	320.00	Rough	Grazing	VII	Grazing	Private
		30	Lots 1,2,3,4, E½W½, NE¼	460.74	Rough	Grazing	VII	Grazing	Federal
		31	Lots 1,2,3,4,E½W½	302.68	Rough	Grazing	VII	Grazing	Federal
		32	N½, SE¼	480.00	Rough	Grazing	VII	Grazing	Federal

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Meade County									
7	10	34	SW¼	160.00	Rolling	Grazing	VII	Grazing	Private
	11	18	SW¼SE¼	40.00	Rolling	Grazing	VI	Grazing	Private
		19	NW¼NE¼	40.00	Rolling	Grazing	VI	Grazing	Private
		19	SE¼NW¼, NE¼SW¼	80.00	Rolling	Grazing	VI	Grazing	Private
	16	25	E½SE¼, SW¼SE¼	120.00	Rolling	Grazing	VII	Grazing	Private
		31	Lots 3,4	60.79	Rolling to broken	Grazing	VII	Grazing	Private
8	10	3	W½SE¼	80.00	Rolling	Grazing	VI	Grazing	Private
		9	W½NW¼, SE¼NW¼	120.00	Rolling	Grazing	VI	Grazing	Private
		10	W½NE¼	80.00	Rolling	Grazing	VI	Grazing	Private
		22	SW¼NE¼	40.00	Rolling	Grazing	VI	Grazing	Private
		28	NW¼NW¼	40.00	Rolling	Grazing	VI	Grazing	Private
	15	5	Lot 3	25.50	Rolling	Grazing	VI	Grazing	Private
		6	Lots 3,4, SW¼SE¼	78.85	Rolling	Grazing	VI	Grazing	Private
	16	12	SW¼SW¼	40.00	Rolling	Grazing	VII	Grazing	Private
	17	3	Lot 4	30.02	Sloping	Grazing	VI	Grazing	Private
9	10	30	SE¼SW¼	40.00	Rolling	Grazing	VI	Grazing	Private
	11	26	N½NE¼	80.00	Rolling	Grazing	VII	Grazing	Private
	14	23	NW¼NE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		28	NW¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
	15	13	SE¼SW¼	40.00	Rolling	Grazing	VI	Grazing	Private
		24	NE¼NW¼	40.00	Rolling	Grazing	VI	Grazing	Private
	16	29	W½W½	160.00	Rolling	Grazing	VII	Grazing	Private
		30	Lot 3, SE¼SW¼, S½SE¼, NE¼NE¼	199.86	Rolling	Grazing	VII	Grazing	Private
		31	NE¼NW¼, W½NE¼, NE¼SW¼	160.00	Rolling	Grazing	VII	Grazing	Private
	17	3	NW¼SW¼	40.00	Rolling	Grazing	VII	Grazing	Private
		23	SW¼NW¼, SW¼NE¼	80.00	Rolling	Grazing	VII	Grazing	Private
10	10	10	N½SE¼	80.00	Level	Grazing	VI	Grazing	Private
	11	8	N½NW¼, SE¼NW¼, NW¼NE¼, S½NE¼	240.00	Rolling	Grazing	VII	Grazing	Private

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Meade County									
10	11	14	NE¼NE¼	40.00	Rough	Grazing	VII	Grazing	Private
		15	S½SE¼	80.00	Rough	Grazing	VII	Grazing	Private
		22	NE¼NE¼	40.00	Rough	Grazing	VII	Grazing	Private
		23	N½NW¼	80.00	Rough	Grazing	VII	Grazing	Private
		26	SW¼NW¼, SW¼SW¼	80.00	Rough	Grazing	VII	Grazing	Private
	12	24	NE¼NW¼	40.00	Rolling	Grazing	V	Grazing	Private
		25	NW¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		31	SE¼NW¼	40.00	Rolling	Grazing	VII	Grazing	Private
		35	SE¼SE¼	40.00	Broken	Grazing	VII	Grazing	Private
	13	19	Lots 2,3	80.19	Rolling	Grazing	VI	Grazing	Private
	14	2	NE¼SW¼	40.00	Rolling	Grazing	VII	Grazing	Private
		4	Lot 4	39.76	Rolling	Grazing	VI	Grazing	Private
	16	1	SE¼NW¼	40.00	Rolling	Grazing	VI	Grazing	Private
	17	26	NE¼SW¼	40.00	Rolling	Grazing	VI	Grazing	Private
11	11	30	NE¼NW¼	40.00	Rolling	Grazing	VII	Grazing	Private
	17	20	NE¼NW¼	40.00	Sloping	Grazing	VI	Grazing	Private
12	11	14	N½NE¼	80.00	Rolling and undulating	Grazing	VI	Grazing	Private
		33	NW¼NE¼	40.00	Rolling and undulating	Grazing	VI	Grazing	Private
		34	NE¼, E½SE¼	240.00	Rolling and undulating	Grazing	VI	Grazing	Private
	14	13	SW¼SE¼, E½SE¼	120.00	Rough and hilly	Grazing	VI	Grazing	Private
		24	NW¼, NW¼NE¼	200.00	Rough and hilly	Grazing	VI	Grazing	Private
	15	18	Lots 3,4	70.86	Rough	Grazing	VI	Grazing	Private
South	East	-Pennington County							
1	8	1	Lot 1	30.53	Rolling	Grazing	VI	Grazing	Private
	13	13	Lot 5	20.00	Level	Grazing	VII	Grazing	Private
		13	Lot 8	22.60	Rough	Grazing	VII	Grazing	Private
		22	Lot 1	18.30	Level	Grazing	VIII	Grazing	Private
		23	NE¼SE¼, S½SE¼	120.00	Rough	Grazing	VII	Grazing	Private
		26	NE¼NE¼	40.00	Rough	Grazing	VII	Grazing	Private
		24	Lot 2	34.80	NOT EXAMINED				

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. South	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Pennington County									
1	13	27	Lot 9	3.82	Level-sand bar	Grazing	VIII	Grazing	Private
		28	Lots 8,9,10	69.25	Level-sand bar	Grazing	VIII	Grazing	Private
2	13	1	Lots 3,4, S½NW¼	158.54	Rough and broken	Grazing	VII	Grazing	Private
		4	Lot 2	39.57	Rough	Grazing	VII	Grazing	Private
		6	Lot 8	38.80	Level	Grazing	VII	Grazing	Private
	14	29	NE¼NW¼	40.00	Rolling	Grazing	VII	Grazing	Private
		31	S½NE¼, N½SE¼, SW¼SE¼	200.00	Rolling	Grazing	VII	Grazing	Private
North East									
1	11	18	Lot 3	41.57	Rough	Grazing	VII	Grazing	Private
	13	1	Lot 1	39.99	Rough	Grazing	VII	Grazing	Private
		13	S½SE¼	80.00	Rough	Grazing	VII	Grazing	Private
		14	NW¼NW¼	40.00	Rolling	Grazing	VII	Grazing	Private
		21	NE¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		22	NW¼SW¼	40.00	Rolling	Grazing	VII	Grazing	Private
		24	NE¼NE¼	40.00	Rough	Grazing	VII	Grazing	Private
	14	1	Lots 1,2	83.34	Rough	Grazing	VII	Grazing	Private
		6	Lots 3,4	80.76	Rough	Grazing	VII	Grazing	Private
		10	SE¼NW¼, E½SW¼, SW¼SW¼	160.00	Rough	Grazing	VII	Grazing	Private
		17	Lot 10	9.50	Level-very sandy	Grazing	VII	Grazing	Private
		18	Lot 4	40.45	Rough	Grazing	VII	Grazing	Private
		29	SE¼	160.00	Rough	Grazing	VII	Grazing	Private
		31	Lots 4,5,7, SE¼SW¼,NW¼SE¼	185.31	Rough	Grazing	VII	Grazing	Private
		32	Lots 3,7	30.86	Rough	Grazing	VII	Grazing	Private
	15	19	SW¼SE¼, SE¼SW¼	80.00	NOT EXAMINED				
2	12	9	SW¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private
	14	1	Lot 5	38.00	NOT EXAMINED				
		2	Lot 9	13.60	NOT EXAMINED				
		22	NE¼NE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		31	Lots 3,4, SE¼SW¼	120.11	Rough	Grazing	VII	Grazing	Private
		35	Lot 4	19.70	Rough	Grazing	VII	Grazing	Private

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Pennington County									
2	15	19	Lot 1	32.78	Very rough and broken	Grazing	VII	Grazing	Private
3	14	35	Lot 11	24.80	Level to rough	Grazing	VII	Grazing	Private
	15	1	N½SW¼	80.00	Rough	Grazing	VII	Grazing	Private
		1	SW¼SE¼	40.00	Rough	Grazing	VII	Grazing	Private
		2	Lot 1, SE¼NE¼	80.31	Rough	Grazing	VII	Grazing	Private
		2	Lot 3, SE¼NW¼, NE¼SW¼	119.91	Rough	Grazing	VII	Grazing	Private
		6	Lot 7,8	53.30	Rough	Grazing	VII	Grazing	Private
		11	E½SW¼, W½SE¼	160.00	Rough	Grazing	VII	Grazing	Private
		24	NW¼SE¼, NE¼SW¼, SW¼NE¼	120.00	Rough	Grazing	VII	Grazing	Private
4	14	24	Lot 2	10.70	Rough	Grazing	VIII	Grazing	Federal
		25	Lots 4, 5	19.70	Rough	Grazing	VIII	Grazing	Federal
Stanley County									
6	29	5	Lot 4	40.64	Broken	Grazing	VII	Multiple	Federal
		5	SW¼NE¼	40.00	Broken	Grazing	VII	Multiple	Federal
7	26	27	NE¼NW¼, N½NE¼	120.00	Rough	Grazing	VII	Grazing	Private
	28	1	Lots 1,2,3,4, S½N½, SE¼	478.40	Rough	Grazing	VII	Multiple	Federal
		2	Lots 1,2,3,4, S½N½, N½S½	476.48	Rough	Grazing	VII	Multiple	Federal
		3	Lot 1, S½NE¼, NE¼SE¼	159.09	Rough	Grazing	VII	Multiple	Federal
		4	SE¼SE¼, SW¼SW¼	80.00	Rolling	Grazing	VI	Multiple	Federal
		8	SE¼NE¼	40.00	Rolling	Grazing	VI	Multiple	Federal
		11	S½SE¼	80.00	Rough	Grazing	VII	Multiple	Federal
		12	N½, SE¼	480.00	Rough	Grazing	VII	Multiple	Federal
		13	N½SE¼, SE¼SE¼	120.00	Rough	Grazing	VII	Multiple	Federal
		20	NW¼NE¼	40.00	Rolling	Grazing	VI	Grazing	Private
		24	SW¼NW¼	40.00	Rolling	Grazing	VII	Grazing	Private
		25	SW¼NE¼	40.00	Rolling	Grazing	VII	Grazing	Private
		25	SW¼SW¼	40.00	Rolling	Grazing	VII	Grazing	Private
		26	NW¼SE¼	40.00	Rolling	Grazing	VII	Grazing	Private

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Stanley County									
7	28	34	NW¼SE¼, S½SE¼	120.00	Rough	Grazing	VII	Multiple	Federal
		35	S½S½	160.00	Rough	Grazing	VII	Multiple	Federal
		35	SE¼NW¼	40.00	Rough	Grazing	VII	Multiple	Federal
		35	S½NE¼	80.00	Rough	Grazing	VII	Multiple	Federal
	29	5	Lots 1,2	93.60	Rough and broken	Grazing	VII	Multiple	Federal
		5	Lot 4	60.80	Rough and broken	Grazing	VII	Multiple	Federal
		6	Lot 7, E½SW¼, SE¼	275.05	Rough and broken	Grazing	VII	Multiple	Federal
		7	Lots 1,2,3,4, E½W½, E½	620.60	Rough and broken	Grazing	VII	Multiple	Federal
		8	W½W½	160.00	Rough and broken	Grazing	VII	Multiple	Federal
		9	Lot 1	10.90	Fairly level-sandy	Grazing	VIII	Multiple	Federal
		15	Lots 2,3	33.60	Fairly level-sandy	Grazing	VIII	Multiple	Federal
		17	W½W½, SE¼SW¼	200.00	Rough and broken	Grazing	VII	Multiple	Federal
		20	E½NW¼, NE¼, N½SE¼	320.00	Rough and broken	Grazing	VII	Multiple	Federal
		24	Lot 1	14.50	Level-sandy	Grazing	VIII	Multiple	Federal
		26	W½NE¼, SE¼NW¼	120.00	Rough	Grazing	VII	Multiple	Federal
		27	S½, S½N½	480.00	Rolling	Grazing	VII	Multiple	Federal
		29	SE¼SW¼	40.00	Rolling	Grazing	VII	Multiple	Federal
		31	SE¼SE¼	40.00	Rolling	Grazing	VII	Multiple	Federal
		32	W½SW¼, NE¼SW¼, E½NW¼, NW¼SE¼	240.00	Rough	Grazing	VII	Multiple	Federal
		33	W½E½	160.00	Rolling	Grazing	VII	Multiple	Federal
		34	E½W½	160.00	Rough	Grazing	VII	Multiple	Federal
		35	NE¼	160.00	Rough	Grazing	VII	Multiple	Federal
8	25	1	W½SW¼, SW¼NW¼	120.00	Steeply rolling to rough	Grazing	VII	Multiple	Federal
		2	Lots 1,2,3,4, S½N½, S½	619.10	Steeply rolling to rough	Grazing	VII	Multiple	Federal
		3	Lots 1,2,3,4, S½N½	303.50	Steeply rolling to rough	Grazing	VII	Multiple	Federal
		4	Lots 1,2,3,4, S½N½, S½	628.90	Steeply rolling to rough	Grazing	VII	Multiple	Federal
		8	NE¼, E½SE¼	240.00	Steeply rolling to rough	Grazing	VII	Multiple	Federal
		10	NW¼	160.00	Steeply rolling to rough	Grazing	VII	Multiple	Federal
		17	NW¼SW¼, SW¼SE¼	80.00	Rolling	Grazing	VII	Grazing	Private

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Stanley County									
8	25	19	Lots 1,2, SE¼NW¼	119.17	Rolling	Grazing	VII	Grazing	Private
		20	W½NE¼, SE¼NE¼	120.00	Rolling	Grazing	VII	Grazing	Private
	26	2	Lot 3	33.40	Rolling	Grazing	VII	Grazing	Private
		4	E½SW¼, SW¼SW¼	120.00	Rough	Grazing	VII	Grazing	Private
		9	W½, SW¼NE¼, NW¼SE¼	400.00	Rough	Grazing	VII	Grazing	Private
		11	S½NW¼, S½	400.00	Rough	Grazing	VII	Grazing	Private
		14	N½	320.00	Rough	Grazing	VII	Grazing	Private
		22	NE¼	160.00	Rough	Grazing	VII	Grazing	Private
		23	N½	320.00	Rough	Grazing	VII	Grazing	Private
	27	3	NE¼SE¼	40.00	Rolling	Grazing	VI	Multiple	Federal
		3	Lot 3	31.25	Rolling	Grazing	VI	Multiple	Federal
		4	Lots 3,4, S½NW¼, N½SW¼	222.46	Rough	Grazing	VII	Multiple	Federal
		5	Lots 1,2, S½NE¼, N½SE¼	222.56	Rough	Grazing	VII	Multiple	Federal
		17	SE¼NW¼	40.00	Rough	Grazing	VII	Grazing	Private
	28	2	S½	320.00	Rolling	Grazing	VII	Multiple	Federal
		3	E½SE¼	80.00	Rolling	Grazing	VII	Multiple	Federal
		3	SE¼NW¼	40.00	Rolling	Grazing	VII	Multiple	Federal
		4	Lot 2	40.26	Rolling	Grazing	VI	Multiple	Federal
		12	SE¼NE¼	40.00	Rough	Grazing	VII	Multiple	Federal
		35	S½SE¼	80.00	Rolling	Grazing	VII	Multiple	Federal
	29	7	SW¼NE¼	40.00	Rough	Grazing	VII	Multiple	Federal
		17	N½NW¼	80.00	Rough	Grazing	VII	Multiple	Federal
		18	NE¼NE¼	40.00	Rough	Grazing	VII	Multiple	Federal
		19	E½SE¼	80.00	Rough	Grazing	VII	Multiple	Federal
		20	Lots 4,5, W½SW¼	135.66	Rough	Grazing	VII	Multiple	Federal
		30	N½NE¼, SE¼NE¼	120.00	Rough	Grazing	VII	Multiple	Federal
		31	W½E½	160.00	Rough	Grazing	VII	Multiple	Federal
9	25	7	Lots 1,2	89.41	Level	Grazing	VII	Multiple	Federal
		15	Lot 2	11.70	Level	Grazing	VII	Multiple	Federal
		17	Lots 2, 3	34.90	Level-sandy	Grazing	VII	Multiple	Federal

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Stanley County									
9	25	20	N½NE¼	80.00	Rough and broken	Grazing	VII	Multiple	Federal
		21	S½NE¼, SE¼, S½SW¼	320.00	Rough and broken	Grazing	VII	Multiple	Federal
		24	Lot 4	11.40	Level-sandy	Grazing	VII	Multiple	Federal
		26	W½	320.00	Rough and broken	Grazing	VII	Multiple	Federal
		27	N½NE¼	80.00	Rough and broken	Grazing	VII	Multiple	Federal
		32	S½SE¼	80.00	NOT EXAMINED				
		35	NW¼	160.00	Rough and broken	Grazing	VII	Multiple	Federal
	26	1	Lot 5	33.65	Level-gravelly	Grazing	VII	Multiple	Federal
		1	W½SW¼	80.00	Rough and broken	Grazing	VII	Multiple	Federal
		2	Lot 1	9.20	Level-gravelly	Grazing	VII	Multiple	Federal
		2	Lot 5	13.30	Level-gravelly	Grazing	VII	Multiple	Federal
		3	Lot 1	30.00	Level-gravelly	Grazing	VII	Multiple	Federal
		3	Lot 4, SE¼SE¼	60.00	Level-gravelly	Grazing	VII	Multiple	Federal
		9	Lots 2,3	59.35	Level-gravelly	Grazing	VII	Multiple	Federal
		10	Lots 1,2, E½NE¼	128.20	Rough and broken	Grazing	VII	Multiple	Federal
		11	SW¼NE¼, NW¼SE¼	80.00	Rough	Grazing	VII	Multiple	Federal
		12	NW¼NW¼	40.00	Rough	Grazing	VII	Multiple	Federal
		12	NW¼SW¼	40.00	Rough	Grazing	VII	Multiple	Federal
		13	S½SW¼	80.00	Rough	Grazing	VII	Multiple	Federal
		21	W½SW¼	80.00	Rolling	Grazing	VII	Multiple	Federal
		24	N½, E½SW¼	400.00	Broken	Grazing	VII	Multiple	Federal
		25	E½SE¼	80.00	Broken	Grazing	VII	Multiple	Federal
		28	S½SE¼, NW¼SE¼, N½SW¼, S½NW¼, NW¼NW¼	320.00	Rolling	Grazing	VII	Multiple	Federal
		29	NE¼SE¼, E½NE¼, NW¼NE¼	160.00	Rolling	Grazing	VII	Multiple	Federal
		29	S½SW¼	80.00	Broken	Grazing	VII	Multiple	Federal
		30	Lots 2,3,4, SE¼NW¼, NE¼NE¼ S½NE¼, E½SW¼, SE¼	519.55	Broken	Grazing	VII	Multiple	Federal
		31	Lots 3,4, E½SW¼	160.00	Broken	Grazing	VII	Mutliple	Federal
		32	NW¼	160.00	Rolling	Grazing	VII	Multiple	Federal
		33	NW¼NE¼	40.00	Rolling	Grazing	VII	Multiple	Federal

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne Area, South Dakota, by Counties, 1953 1/ -Continued

Black Hills Meridian Twp. North	Range East	Sec.	Subdivision	Acres	General Land Character	Present Land Use	Land Capability Classification	Principal Suitability	Proposed Management
Stanley County									
9	27	2	Lot 1	13.00	Broken	Grazing	VII	Multiple	Federal
		5	SW¼NW¼	40.00	Broken	Grazing	VII	Multiple	Federal
		11	SE¼SE¼	40.00	Broken	Grazing	VII	Multiple	Federal
		12	SW¼SW¼	40.00	Broken	Grazing	VII	Multiple	Federal
		13	NW¼NW¼, E½E½	200.00	Broken	Grazing	VII	Multiple	Federal
		14	NE¼NE¼	40.00	Broken	Grazing	VII	Multiple	Federal
		18	Lots 3,4	79.86	Broken	Grazing	VII	Grazing	Private
		19	Lots 1,2,3, NE¼NW¼	158.14	Broken	Grazing	VII	Grazing	Private
		23	E½SE¼	80.00	Broken	Grazing	VII	Grazing	Private
		24	NE¼NE¼	40.00	Broken	Grazing	VII	Grazing	Private
		25	SW¼	160.00	Broken	Grazing	VII	Grazing	Private
		26	SE¼NW¼	40.00	Broken	Grazing	VII	Grazing	Private
		34	SE¼	160.00	Broken	Grazing	VII	Grazing	Private
		35	NE¼	160.00	Broken	Grazing	VII	Grazing	Private
	28	5	Lots 1,2	31.50	Rough	Grazing	VII	Multiple	Federal
		6	Lots 2,3,4,5,6	125.48	Level to rough	Grazing	VII	Multiple	Federal
		7	Lots 1,8,9,10	106.10	Level to rough	Grazing	VII	Multiple	Federal
		9	SW¼, S½NW¼	240.00	Rough	Grazing	VII	Multiple	Federal
		15	SE¼SE¼	40.00	Rolling	Grazing	VII	Multiple	Federal
		22	E½NE¼	80.00	Rolling	Grazing	VII	Multiple	Federal
		23	SE¼NW¼	40.00	Rolling	Grazing	VII	Multiple	Federal
		27	All	640.00	Rough	Grazing	VII	Multiple	Federal
		28	S½	320.00	Rough	Grazing	VII	Multiple	Federal
		29	E½SE¼	80.00	Rough	Grazing	VII	Multiple	Federal
		29	W½NW¼	80.00	Rolling	Grazing	VII	Multiple	Federal
		30	Lots 1,2,7,8,9,10,11, 12, E½W½, W½E½	559.60	Rolling	Grazing	VII	Multiple	Federal
	29	20	Lot 1	30.87	Level to steeply sloping	Grazing	VII	Multiple	Federal

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Table 2.- Description, Area, Classification, Suitability and Proposed Management of Scattered Tracts of Public Domain Within the Lower Cheyenne River Area, South Dakota, by Counties, 1953 1/ -Continued

Totals by Areas	Total Acres	Acres by Land Capability Classes					
		II	V	VI	VII	VIII	Not Examined
Scattered Tracts:							
Butte County	11,135.86			11,015.86			120.00
Haakon County	12,789.36			251.84	11,977.58	479.94	80.00
Meade County	17,131.15	40.00	40.00	3,000.04	13,971.91	39.20	40.00
Pennington County	3,000.90			30.53	2,682.20	121.77	166.40
Stanley County	19,325.13			271.51	18,914.62	59.00	80.00
Total	63,382.40	40.00	40.00	14,569.78	47,546.31	699.91	486.40
Big Bend Subarea:							
Meade County	20,653.00						
Pennington County	13,852.00						
Total	34,505.00		399.00	1,167.00	31,341.00	1,598.00	
Fort Meade Surplus, Meade County	5,507.00						
GRAND TOTAL	102,944.40						

BLM
Region III
5-30-53

Table 3. Description and definitions of land-use capability classes [1]

Class	Suitable for	Topography		Characteristic Native Vegetation	Soil Characteristics						Vulnerability to Erosion	Requisite Special Practices
		Slope (percent)	Character of Surface		Texture	Depth	Relative Salinity	Fertility	Productivity	Drainage		
I	Best type of farming land	0 to 2	Level or nearly level	Tall and mid-grasses, thrifty sagebrush, deciduous trees	Medium; Friable	12" or more; subsoil 36" or more	Negligible	High	Good to High	Good to Excellent	Low	None to minor
II	Farming with simple conservation practices	0 to 10	Irregular	Tall, mid, and short grasses; big sagebrush, deciduous trees	Light to Heavy; Friable	8" or more; subsoil 36" or more	Negligible to slight	Good to High	Moderate to High	Good	Slight to moderate	Minor to simple practices
III	Farming with complex conservation practices	0 to 10	Irregular	Tall, mid, and short grasses; big sagebrush, rabbitbrush, greasewood, coniferous, and deciduous trees	Light to Heavy; Friable	6" or more; subsoil 24" or more	Slight to moderate	Fair to Good	Moderate to High with management	Often poor; may be needed	Moderate to High	Complex practices essential
IV	Limited or occasional cultivation; best for permanent hay or pasture	0 to 15	Irregular or stony	Tall, mid, and short grasses; big sagebrush, rabbitbrush, greasewood, coniferous, deciduous trees, saltbush, winterfat	Sandy to Clay; porous or tight	6" or more; may have shallow hardpan	Negligible to critical	Poor to Good	Poor for row crops; best for hay and pasture	Not justifiable if needed	Moderate to High or nil	Complex and intensive practices with good management
V	Range or woodland; farming only if irrigation water becomes available	0 to 5	Smooth to irregular; may be stony or wet	Tall, mid, and short grasses; big sagebrush, rabbitbrush, greasewood, coniferous, and deciduous trees	Light to Heavy; Friable	Good permeability to 24" depth	Negligible to moderate	Good to High	Moderate to High	Usually not a problem	Low	None to minor or drainage
VI	Range and woodland only	0 to 20 (greater only on good soils)	Irregular to rough or rocky	Tall, mid, and short grasses; big sagebrush, rabbitbrush, greasewood, coniferous, deciduous trees, saltbush, winterfat	Very Light to Heavy	Shallow to moderate; permeability excessive to poor	Negligible to moderate	Fair to Good	Light to Moderate;	Not practicable if a problem	Moderate	Proper management with simple restrictions
VII	Range and woodland with severe restrictions	0 to 100	Rough, rocky, or eroded	Tall, mid, and short grasses; big sagebrush, rabbitbrush, greasewood, coniferous, deciduous trees, saltbush, winterfat, mountain browse and annuals	Any: May be tight clay or open sand or gravel	Often shallow, poorly developed	Negligible to critical	May be Poor	Poor to Light	Seldom a problem or not practicable	High	Proper management with complex restrictions and intensive practices
VIII	Watershed, wildlife and recreation	Generally steep or swampy	Extremely rough, barren or inaccessible	Often only annuals or scanty perennials; may be dense coniferous timber	Usually poorly developed	Very shallow or nil	May be excessive for plant growth	Usually very low	Usually very low or nil	Often poor; not justifiable if a problem	High (unless a swamp)	Complete protection

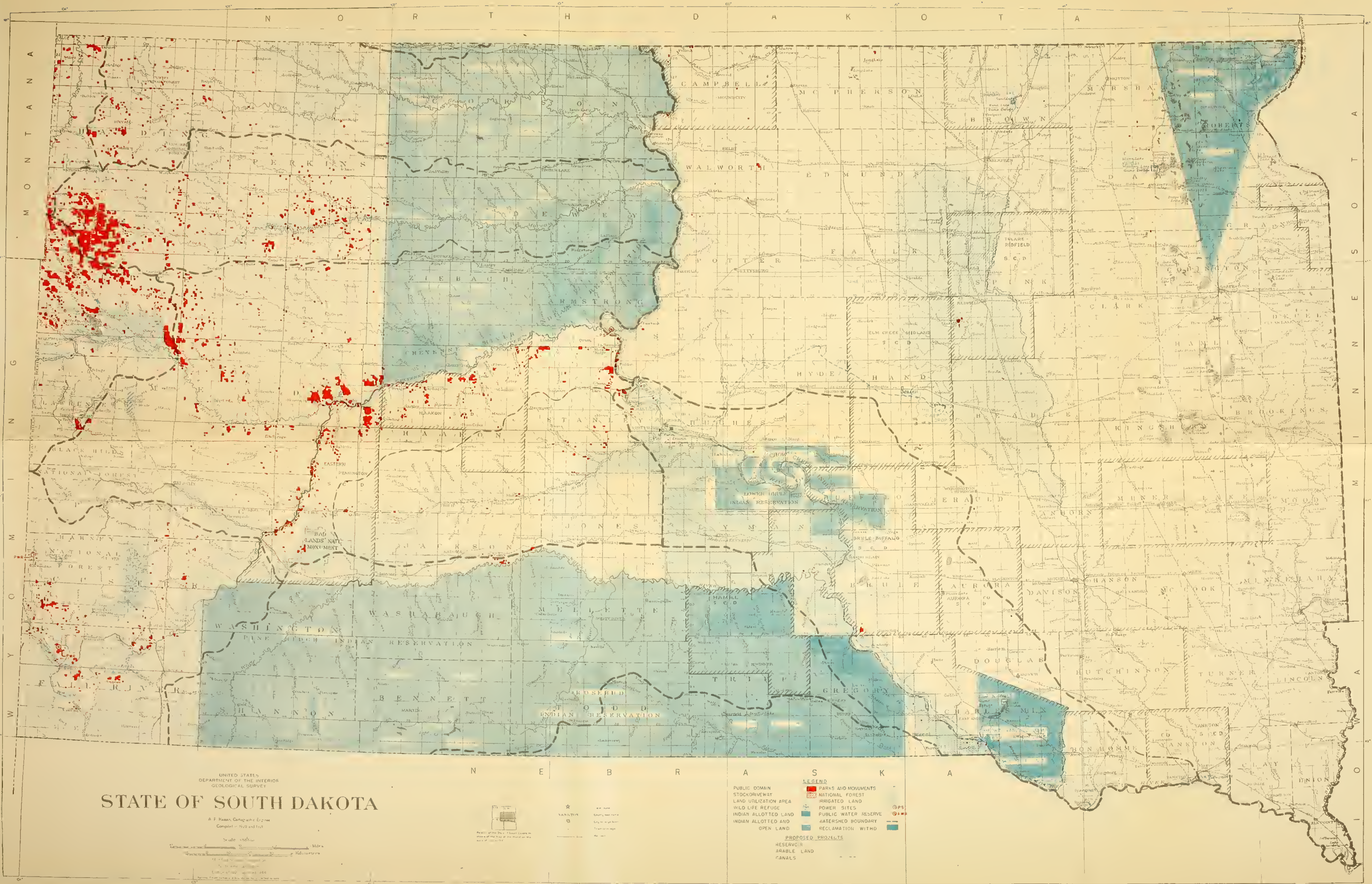
[1] Adapted from Soil Conservation Service Standards, U. S. Department of Agriculture. Any one of the factors listed may classify a soil, factors determining classification singly, not necessarily in combination.

Table 4. -Plants of the Lower Cheyenne River Basin with their scientific and common names:

Technical Name		Common Name
Grasses		
Agropyron	pauciflorum	slender wheatgrass
	smithi	bluestem wheatgrass
Agrostis	alba	red top
Andropogon	furcatus	big bluestem
	halli	sand bluestem
	scoparius	little bluestem
Aristida	longiseta	red threeawn
Bouteloua	curtipendula	sideoats grama
	gracilis	blue grama
	hirsuta	hairy grama
Bromus	inermis	smooth brome
	carinatus	Mountain brome
Buchloe	dactyloides	buffalograss
Calamagrostis	rubescens	pinegrass
Calamovilfa	longifolia	prairie sandreedgrass
Danthonia	intermedia	timber danthonia
Distichilis	stricta	inland saltgrass
Elymus	canadensis	Canada wildrye
Festuca	ovina	sheep fescue
Hordeum	jubatum	foxtail barley
Koelaria	cristata	prairie junegrass
Muhlenbergia	cuspidata	stonyhills Muhly
	racemosa	green Muhly
Orizopsis	hymenoides	Indian ricegrass
Panicum	virgatum	switchgrass
Phleum	alpinum	alpine timothy
	pratense	timothy
Poa	compressa	Canada bluegrass
	pratensis	Kentucky bluegrass
	secunda	Sandberg bluegrass
Schedonnardus	paniculatus	tumblegrass
Sitanion	hystrix	bottlebrush squirreltail
Spartina	pectinata	prairie cordgrass
Sporobolus	airoides	alkali sacaton
	cryptandrus	sand dropseed
	heterolepis	prairie dropseed
Stipa	comata	needleandthread
	spartea	porcupine grass
	viridula	green needlegrass

Technical Name		Common Name
Grass-like Plants		
Carex	filifolia	threadleaf sedge
Forbs		
Achillea	lanulosa	western yarrow
Calochortus	nuttalli	segolily mariposa
Chenopodium	album	lambsquarters goosefoot
Cirsium	arvense	Canada thistle
	undulatum	wavyleaf thistle
Glycyrrhiza	lepidota	American licorice
Grindelia	squarrosa	curlycup gumweed
Helianthus	annus	common sunflower
Iris	missouriensis	Rocky Mountain iris
Penstemon	grandiflorus	shell-leaf penstemon
Salsoa	tenuifolia	tumbling Russian thistle
Shrubs		
Arctostaphylos	uva-ursi	bearberry; Kinnikinnick
Artemisia	gnaphalodes	cudweed sagebrush
	tridentata	big sagebrush
Opuntia	polycantha	plains pricklypear
Rhus	trilobata	skunkbush sumac
Ribes	americanum	American black currant
	setosum	Redshoot gooseberry
Rosa	woodsi	woods rose
Shepherdia	argentea	silver buffaloberry
Symphoricarpos	albus	common snowberry
Trees		
Acer	negundo	boxelder
Amelanchier	alnifolia	Saskatoon serviceberry
Betula	papyrifera	paper birch
Crataegus	(spp)	hawthorn
Fraxinus	lanceolata	green ash
Juniperus	communis	common juniper
	saxatilis	mountain creeping juniper
	scopulorum	RockyMountain juniper

Technical Name		Common Name
Trees		
Picea	glauca	white spruce
Pinus	ponderosa	ponderosa pine
Populus	deltoides	eastern poplar; river cottonwood
	tremuloides	quaking aspen
Prunus	americana	American plum
	melanocarpa	black chokecherry
Quercus	Macroparpa	bur oak
Ulmus	americana	American elm
	fulva	Slippery elm



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